JVC

SERVICE MANUAL

COMPUTER CONTROLLED STEREO RECEIVER

MODEL NO. RX-5VBK
RX-5VLBK

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No. 2904
Mar. 1986

Safety Precaution

1. The design of this product contains special hardware, many circuits and components specially for safety purposes.
   For continued protection, no changes should be made to the original design unless authorized in writing by the manufacturer. Replacement parts must be identical to those used in the original circuits. Service should be performed by qualified personnel only.
2. Alterations of the design or circuitry of the product should not be made. Any design alterations or additions will void the manufacturer's warranty and will further relieve the manufacturer of responsibility for personal injury or property damage resulting therefrom.
3. Many electrical and mechanical parts in the product have special safety-related characteristics. These characteristics are often not evident from visual inspection nor can the protection afforded by them necessarily be obtained by using replacement components rated for higher voltage, wattage, etc. Replacement parts which have these special safety characteristics are identified in the parts list of Service manual. Electrical components having such features are identified by shading on the schematics and by (⚠) on the parts list in Service manual. The use of a substitute replacement which does not have the same safety characteristics as the recommended replacement part shown in the parts list in Service manual may create shock, fire, or other hazards.
4. The leads in the products are routed and dressed with ties, clamps, tubings, barriers and/or the like to be separated from live parts, high temperature parts, moving parts and/or sharp edges for the prevention of electric shock and fire hazard.
   When service is required, the original lead routing and dress should be observed, and they should be confirmed to be returned to normal, after re-assembling.
5. Leakage current check
   (Safety for electrical shock hazard)
   After re-assembling the product, always perform an isolation check on the exposed metal parts of the Products (antenna terminals, knobs, metal cabinet, screw heads, headphone jack, control shafts, etc.) to be sure the product is safe to operate without danger of electrical shock.
   Do not use a line isolation transformer during this check.
   - Plug the AC line cord directly into the AC outlet. Using a "Leakage Current Tester", measure the leakage current from each exposed metal part of the cabinet, particularly any exposed metal part having a return path to the chassis, to a known good earth ground. Any leakage current must not exceed 0.5 mA AC (r.m.s.).
   - Alternate check method
     Plug the AC line cord directly into the AC outlet. Use an AC voltmeter having 1,000 ohms per volt or more sensitivity in the following manner. Connect a 1500 Ω 10 W resistor paralleled by a 0.15 μF AC-type capacitor between an exposed metal part and a known good earth ground.
     Measure the AC voltage across the resistor with the AC voltmeter.
     Move the resistor connection to each exposed metal part, particularly any exposed metal part having a return path to the chassis, and measure the AC voltage across the resistor. Now, reverse the plug in the AC outlet and repeat each measurement. Any voltage measured must not exceed 0.75 V AC (r.m.s.). This corresponds to 0.5 mA AC (r.m.s.).

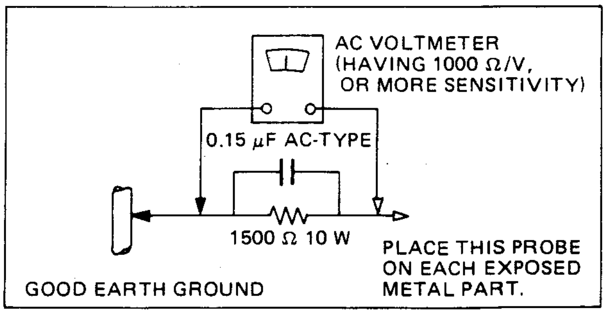
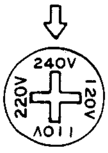


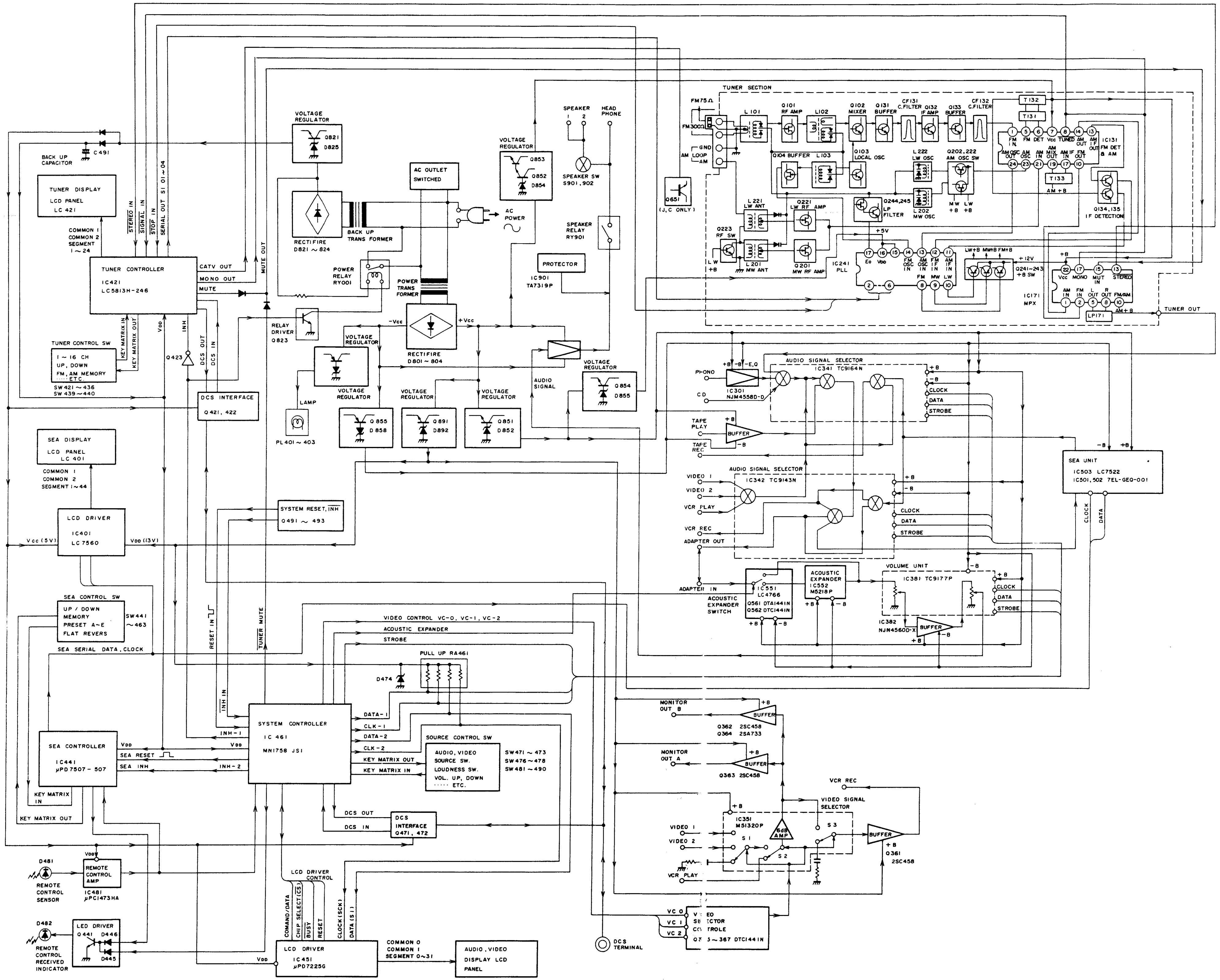
Fig. 1

CHECKING YOUR LINE VOLTAGE (For U.S. Military Market and Other Countries)
Before inserting the power plug, please check this setting to see that it corresponds with the line voltage in your area. If it doesn't, be sure to adjust the voltage selector switch to the proper setting before operating this equipment. The voltage selector switch is located on the rear panel.

CAUTION: Before selecting the "Voltage selector switch" to proper voltage, disconnect the power plug.



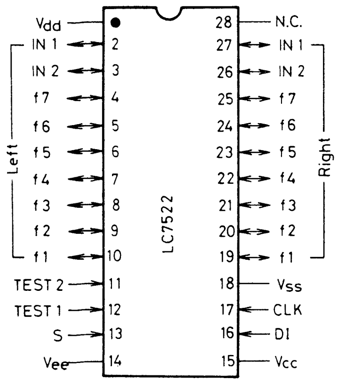
Block Diagram

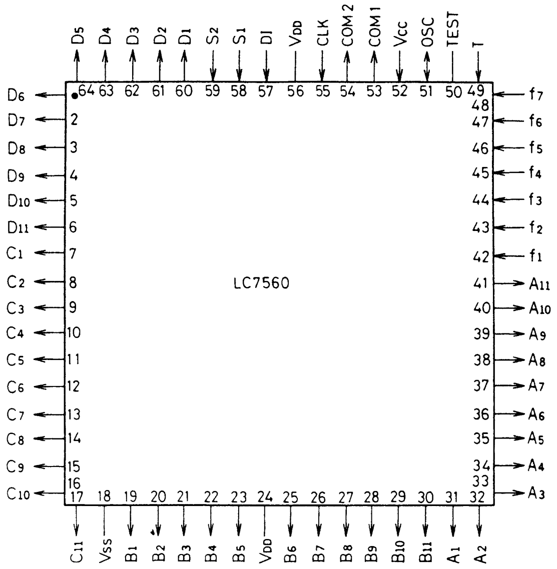

VOLTAGE REGULATOR
Q821
D825
BACK UP CAPACITOR
C491
TUNER DISPLAY
LCD PANEL
LC 421
COMMON 1
COMMON 2
SEGMENT 1 ~ 24
STEREO IN
SIGNAL IN
STOP IN
SERIAL OUT S1 01 ~ 04
TUNER CONTROLLER
IC421
LC5813H-246
CATV OUT
MONO OUT
MUTE
MUTE OUT
KEY MATRIX IN
KEY MATRIX OUT
VDD
INH
Q423
DCS OUT
DCS IN
TUNER CONTROL SW
1 ~ 16 CH
UP, DOWN
FM, AM MEMORY
····· ETC.
SW421 ~ 436
SW439 ~ 440
DCS INTERFACE
Q421, 422
RECTIFIRE
D821 ~ 824
BACK UP TRANS FORMER
AC OUTLET SWITCHED
AC POWER
POWER RELAY RY001
POWER TRANS FORMER
RELAY DRIVER
Q823
-Vcc
+Vcc
RECTIFIRE
D801 ~ 804
VOLTAGE REGULATOR
LAMP
PL401 ~ 403
VOLTAGE REGULATOR
Q855
D858
VOLTAGE REGULATOR
Q891
D892
VOLTAGE REGULATOR
Q851
D852
VOLTAGE REGULATOR
Q853
Q852
D854
SPEAKER
1
2
HEAD PHONE
SPEAKER SW
S901, 902
SPEAKER RELAY
RY901
PROTECTOR
IC901
TA7319P
AUDIO SIGNAL
VOLTAGE REGULATOR
Q854
D855
Q651
(J, C ONLY)
TUNER SECTION
FM75Ω
FM300Ω
GND
AM LOOP
AM
L101
Q101
RF AMP
L102
Q102
MIXER
Q131
BUFFER
CF131
C.FILTER
Q132
IF AMP
Q133
BUFFER
CF132
C.FILTER
T132
T131
Q104 BUFFER
L103
Q103
LOCAL OSC
L222
LW OSC
Q202, 222
AM OSC SW
L202
MW OSC
MW +B
LW +B
Q244, 245
LP FILTER
L221
LW ANT
Q221
LW RF AMP
Q223
RF SW
LW
+B
L201
MW ANT
Q201
MW RF AMP
+5V
IC241
PLL
Eo
VDD
FM OSC IN
AM OSC IN
FM IF IN
AM IF IN
FM
MW
LW
LW+B
MW+B
FM+B
+12V
Q241~243
+B SW
FM IN
FM DET
Vcc
TUNED
AM OUT
AM IF OUT
IC131
FM DET & AM
AM OSC OUT
AM OSC
AM IN
AM MIX OUT
AM IF IN
FM OUT
T133
AM +B
Q134, 135
IF DETECTION
+B
Vcc
MONO
MUT IN
STEREO
IC171
MPX
AM IN
FM IN
L OUT
R OUT
FM/AM
LP171
AM+B
TUNER OUT
PHONO
+B
-B
-E,Q
IC301
NJM4558D-D
CD
AUDIO SIGNAL SELECTOR
IC341 TC9164N
CLOCK
DATA
STROBE
TAPE PLAY
BUFFER
TAPE REC
AUDIO SIGNAL SELECTOR
IC342 TC9143N
VIDEO 1
VIDEO 2
VCR PLAY
VCR REC
ADAPTER OUT
ADAPTER IN
ACOUSTIC EXPANDER SWITCH
IC551
LC4766
Q561 DTA144IN
Q562 DTC144IN
ACOUSTIC EXPANDER
IC552
M5218P
VOLUME UNIT
IC381 TC9177P
IC382
NJM4560D-X
SEA UNIT
IC503 LC7522
IC501, 502 7EL-GEQ-001
SEA DISPLAY
LCD PANEL
LC 401
COMMON 1
COMMON 2
SEGMENT 1 ~ 44
LCD DRIVER
IC401
LC7560
Vcc (5V)
VDD (13V)
SYSTEM RESET, INH
Q491 ~ 493
SEA CONTROL SW
UP / DOWN
MEMORY
PRESET A~E
FLAT REVERS
SW441 ~ 463
SEA SERIAL DATA, CLOCK
RESET IN
TUNER MUTE
VIDEO CONTROL VC-0, VC-1, VC-2
ACOUSTIC EXPANDER
STROBE
PULL UP RA461
D474
INH IN
SYSTEM CONTROLLER
IC 461
MN1758 JS1
DATA-1
CLK-1
DATA-2
CLK-2
KEY MATRIX OUT
KEY MATRIX IN
INH-1
VDD
INH-2
SOURCE CONTROL SW
AUDIO, VIDEO
SOURCE SW.
LOUDNESS SW.
VOL. UP, DOWN
····· ETC.
SW471 ~ 473
SW476 ~ 478
SW481 ~ 490
SEA CONTROLLER
IC441
μPD7507-507
SEA RESET
SEA INH
KEY MATRIX IN
KEY MATRIX OUT
DCS OUT
DCS IN
DCS INTERFACE
Q471, 472
D481
REMOTE CONTROL SENSOR
REMOTE CONTROL AMP
IC481
μPC1473HA
D482
LED DRIVER
Q441
D446
D445
REMOTE CONTROL RECEIVED INDICATOR
LCD DRIVER CONTROL
COMAND/DATA
CHIP SELECT (CS)
BUSY
RESET
CLOCK (SCK)
DATA (S1)
LCD DRIVER
IC451
μPD7225G
COMMON 0
COMMON 1
SEGMENT 0~31
AUDIO, VIDEO DISPLAY LCD PANEL
LC451
MONITOR OUT B
Q362 2SC458
Q364 2SA733
MONITOR OUT A
Q363 2SC458
VCR REC
VIDEO SIGNAL SELECTOR
IC351
M51320P
6dB AMP
S1
S2
S3
Q361
2SC458
DCS TERMINAL
VC 0
VC 1
VC 2
VIDEO SELECTOR CONTROLE
Q365 ~ 367 DTC144IN

Technical Explanations

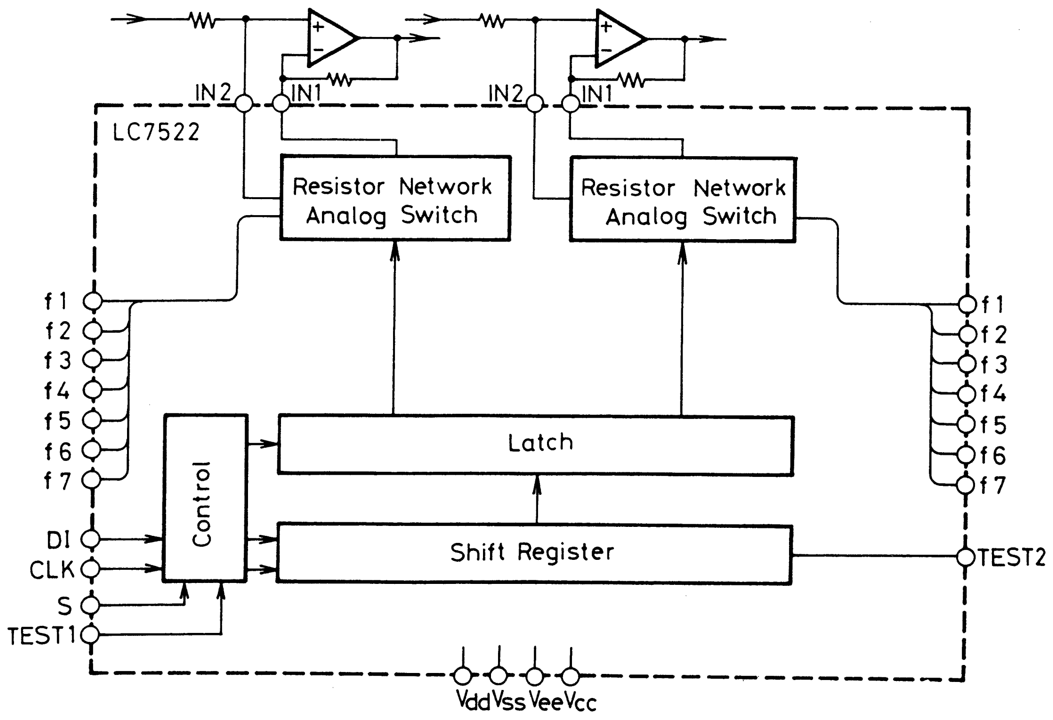
Among the various LSI's adopted on this model, explanations are made in this Section especially on the two types of LSI's assigned to SEA control by the computer. These two LSI's are LC7522 (Symbol No. IC503) and LC7560 (Symbol No. IC401).

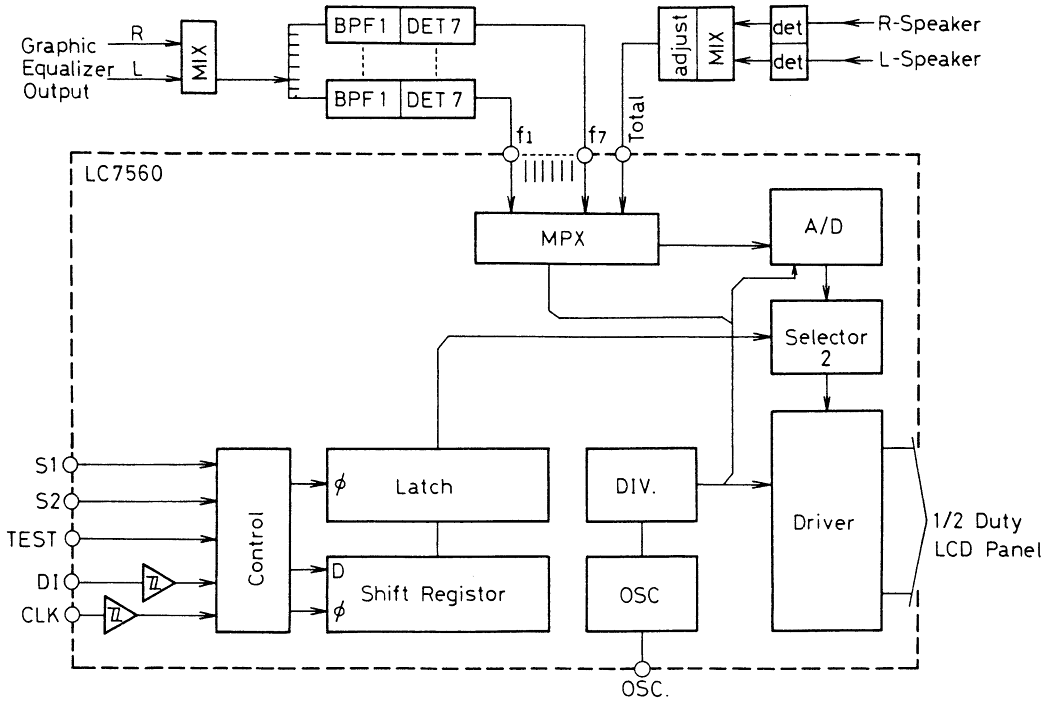
■ Terminal Layout Diagram


LC7522
Vdd 1
IN 1 2
IN 2 3
f 7 4
f 6 5
f 5 6
f 4 7
f 3 8
f 2 9
f 1 10
Left
TEST 2 11
TEST 1 12
S 13
Vee 14
28 N.C.
27 IN 1
26 IN 2
25 f 7
24 f 6
23 f 5
22 f 4
21 f 3
20 f 2
19 f 1
Right
18 Vss
17 CLK
16 DI
15 Vcc


LC7560
D6 1
D7 2
D8 3
D9 4
D10 5
D11 6
C1 7
C2 8
C3 9
C4 10
C5 11
C6 12
C7 13
C8 14
C9 15
16
C10 17
C11
18 Vss
19 B1
20 B2
21 B3
22 B4
23 B5
24 VDD
25 B6
26 B7
27 B8
28 B9
29 B10
30 B11
31 A1
32 A2
A3
33
34 A4
35 A5
36 A6
37 A7
38 A8
39 A9
40 A10
41 A11
42 f1
43 f2
44 f3
45 f4
46 f5
47 f6
48
49 f7
T
50 TEST
51 OSC
52 Vcc
53 COM1
54 COM2
55 CLK
56 VDD
57 DI
58 S1
59 S2
60 D1
61 D2
62 D3
63 D4
64 D5

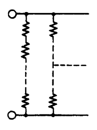
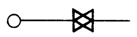
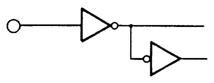
■ Interior Block Diagram


LC7522
IN2
IN1
IN2
IN1
Resistor Network
Analog Switch
Resistor Network
Analog Switch
f 1
f 2
f 3
f 4
f 5
f 6
f 7
f 1
f 2
f 3
f 4
f 5
f 6
f 7
Control
Latch
Shift Register
DI
CLK
S
TEST1
TEST2
Vdd Vss Vee Vcc

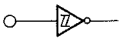
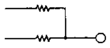
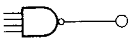
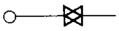
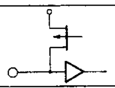
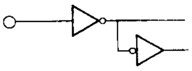

Graphic Equalizer Output
R
L
MIX
BPF 1
DET 7
BPF 1
DET 7
adjust
MIX
det
det
R-Speaker
L-Speaker
f1
f7
Total
LC7560
MPX
A/D
Selector 2
S1
S2
TEST
DI
CLK
Control
ϕ
Latch
D
Shift Registor
ϕ
DIV.
OSC
Driver
1/2 Duty LCD Panel
OSC.

■ Explanation of Each Terminal

LC7522 (Graphic Equalizer) C-MOS LSI, 7 bands, right-side/left-side independent,
±2 dB step, ±10 dB variable

Name	Terminal No.	Terminal type	Explanation
VDD	1	—	Power supply terminal, +7 V Power supply for voice signals
Vcc	15		Power supply terminal, +5 V Power supply for logic drive
Vss	18		Power supply terminal, 0 V
VEE	14		Power supply terminal, −7 V Power supply for voice signals
DI	16		Terminal for data input from CPU Schmitt inverter type
CLK	17		Terminal for clock input from CPU Schmitt inverter type
GND	–	—	Voice-signal system GND
IN 1	2, 27		Input terminal for voice signals IN1 to be connected to OP amplifier inversion input
IN 2	3, 26		IN2 to be connected to OP amplifier noninversion input Provided both on right side and on left side
$f_1 \sim f_7$	10 ~ 4 19 ~ 25		Connection terminal for band filter $f_1 \sim f_7$ x right side/left side Total 14 terminals
S	13		Select terminal when 2 chips are used Key code: 7C3 under "1" input → Connect to VDD. Key code: 7C2 under "0" input → Connect to VEE.

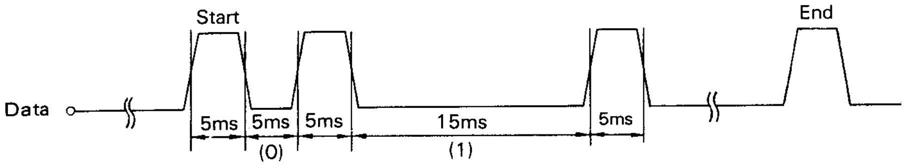
LC7560 (LCD Display Driver) C-MOS LSI, 7 bands, ±2 dB step, 11-point display

Name	Terminal No.	Terminal type	Explanation
V_{DD}	24 56	—	Power supply terminal, +13 V Power supply for A/D conversion
V_{CC}	52		Power supply terminal, +5 V Power supply for logic drive
V_{SS}	18		Power supply terminal, 0 V
DI	57		Terminal for data input from CPU Schmitt inverter type
CLK	55		Terminal for clock input from CPU Schmitt inverter type
COM1 COM2	53 54		Output terminal to LCD common
A_1 ~ A_{11}	31 ~ 41		Output terminal to LCD segment For bands f_1 and f_2
B_1 ~ B_{11}	19 ~ 30		Output terminal to LCD segment For bands f_3 and f_4
C_1 ~ C_{11}	7 ~ 17		Output terminal to LCD segment For bands f_5 and f_6
D_1 ~ D_{11}	60 ~ 64 1 ~ 6		Output terminal to LCD segment For band f_7 and total display
f_1 ~ f_7	42 ~ 48		Input terminal for voice signal detection output
T	49		Input terminal for total display Inputs signal detection output
OSC	51		Open-drain-type output buffer Connection terminal of exterior-mounted CR for oscillator
S1	58		Select terminal when a plural number of chips is used (max. 4 chips) S1 | S2 | Key Code 1 | 1 | FB 0 | 1 | FA 1 | 0 | F9 0 | 0 | F8
S2	59		

■ Data Transmission through Synchro Terminal

As the synchro terminal has a common bus line to other equipment to be connected externally, data of the both can be mutually exchanged according to the transmission method shown below.

■ Data transmission



Signals "0" and "1" of data are transmitted being discriminated by different intervals between pulses.
Namely, pulse interval 5 ms .... "0"
pulse interval 15 ms .... "1"

Every transmission datum is composed of 8 bits, therefore, number of pulses for a datum is nine.

■ Configuration of datum

Binary-coded signal

b_7	b_6	b_5	b_4	b_3	b_2	b_1	b_0
1	0	1	0	0	0	0	1

Note
DCS: Direct Call System

Upper 4 bits
↓ Hexadecimal digit
A

Lower 4 bits
↓ Hexadecimal digit
1

A 1 : To change amplifier's sound source to PHONO.
DCS code Content of code

■ Relationship between Remote Control Transmitter (RM-S9) and DCS* Codes

SLEEP TIMER	POWER		
	VCR	TV	AUDIO
–	–	–	1) C0 2) C1
63 Hz/1	160 Hz/2	400 Hz/3	SEA CONTROL
3) D1	3) D2	3) D3	–
1 kHz/4	2.5 kHz/5	6.3 kHz/6	FM
3) D4	3) D5	3) D6	C2
16 kHz/7	8	9	AM
3) D7	3) D8	3) D9	C3
0	– PRESET STATION SEA LEVEL	+	VIDEO 1/TV
3) D0	3) C7	3) C6	–
ACOUSTIC EXPANDER			VIDEO2
–			–
SOUND SELECTOR	SEA ON/DEFEAT	SEA PRESET	
–	–	–	
VCR	PHONO	CD	TAPE
–	A1	A3	A4
– CHANNEL SKIP	+	STOP	PLAY
7) 44 8) 2C	7) 43 8) 2B	6) 86 7) 42 8) 2E	6) 87 7) 41 8) 21
TAPE CONTROL	PAUSE/STILL	STOP	REC
–	9) 25 10) 2D	9) 22	11) 2D 12) 29
VCR CONTROL	◀◀	PLAY	▶▶
–	9) 24	9) 20 10) 29	9) 23
MUTE		– VOLUME	+
10) 26		–	–

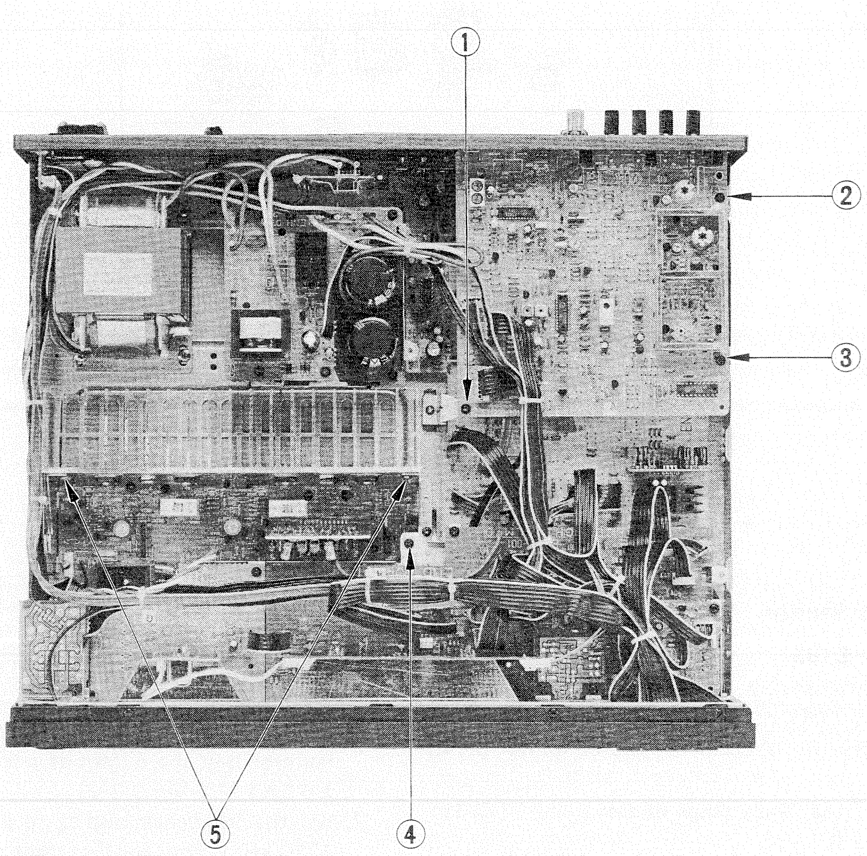
Notes:

1) AUDIO (POWER) key is pressed in STANDBY mode.
2) AUDIO (POWER) key is depressed at turning on power.
3) After depressing FM/AM key, another key is pressed.

6) After depressing PHONO key, another key is pressed.
7) After depressing CD key, another ksy is pressed.
8) After depressing TAPE key, another key is pressed.
9) After depressing TAPE CONTROL key, another key is pressed.
10) After depressing TAPE CONTROL key, this key and REC key are pressed at the same time.
11) After depressing TAPE CONTROL key, this key and PAUSE/STILL key are pressed at the same time.
12) After pressing TAPE CONTROL key, this key and PLAY key are pressed at the same time.

* DCS : Direct Call System

Removal Procedures



(1) Removing the Front Panel

Step 1: Demount the top cover by removing four screws from the two sides and two screws from the rear.

Step 2: Remove three screws securing the front panel on its upper side and three screws securing it on the lower side.

Step 3: Demount the switch P.C. board secured to the front panel with catches.

(2) Removing the Tuner P.C. Board

Step 1: Demount the top cover (see above item (1), Step 1).

Step 2: Remove three screws ① throuth ③ securing the tuner P.C. board on its upper side.

Step 3: Remove four screws securing the antenna terminal on its rear side.

(3) Checking-up the Pre-Amplifier P.C. Board

Step 1: Demount the tuner P.C. board (see above item (2)).

Step 2: Demount the bottom cover by removing three screws from the bottom.

(4) Checking-up the Power Amplifier P.C. Board

Step 1: Demount the top cover (see above item (1), step 1).

Step 2: Demount the bottom cover by removing two screws from the bottom.

(5) Removing the Front Bracket

Step 1: Demount the front panel (see above item (1)).

Step 2: Remove one screw ④ securing the front bracket on its upper side.

Step 3: Remove one screw securing the front bracket on its bottom side.

Step 4: Remove four screws securing the front bracket on its front side (toward you).

(6) Removing the Power Transistors

Step 1: Demount the top cover (see above item (1), step 1).

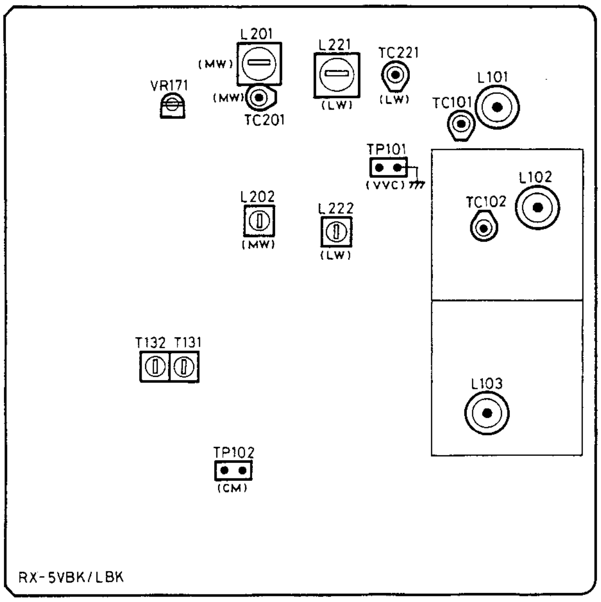
Step 2: Demount the bottom cover (see above item (4), step 2).

Step 3: Remove four screws ⑤ securing the heat-sink by a bended screwdriver.

Step 4: Resolder the pins of power transistors.

Note: Part number of the bended screwdriver is "EBSJ-1005".

FM/MW/LW Tuner Alignment Procedures



3-(1) Front-end Section

FM oscillator coil : L103

1. Set the frequency display to "108.0 MHz" and the FM MODE switch to "MONO" position.
2. Confirm that the noise occurs in the condition of no signal input.
3. Adjust L103 so that the voltage of test point "TP101" becomes 9.0 V ± 0.1 V.
4. Set the frequency display to "87.5 MHz" and confirm that the output of test point "TP101" is 1.6 V ± 0.5 V.

FM antenna coil : L101, L102

5. Adjust L101 and L102 to obtain the maximum sensitivity at 89.9 MHz.

FM atenna trimmer : TC101, TC102

6. Adjust TC101 and TC102 to obtain the maximum sensitivity at 105.9 MHz.
7. Repeat the above adjustment of L101, L102, TC101 and TC102.

Note: After adjustment, confirm that the Band Cover is in the following range (for West Germany only).
Lower edge : 87.5 MHz (+0 Hz, −300 kHz)
Higher edge : 108.0 MHz (+500 kHz, −0 Hz)

3-(2) IF Detection

FM detector coil : T131, T132

1. Connect a center-meter or a digital voltmeter to test point "TP102", and receive to 100.1 MHz signal in the condition of SSG ATT 70 dB.
2. Adjust T131 so that the center-meter indicates "0" or the digital voltmeter reads 0 mV.
3. At the same time, adjust T132 so that the distortion is minimized.

Stereo separation (for Europe, U.K. and Australia)
Tune in to 98.1 MHz. Adjust VR171 so that the channel separation becomes maximum.

3-(3) MW Section

Note: ( ) ; 9 kHz step, [ ] ; 10 kHz step

MW oscillator coil : L202

1. Set the frequency display to (522 kHz) [530 kHz] and confirm that the output at test point "TP101" is (1.1 V ± 0.3 V) [1.1 V ± 0.3 V].
2. Set the frequency display to (1629 kHz) [1630 kHz or 1710 kHz] and confirm that the output at test point "TP101" is (7.5 V ± 0.8 V) [7.5 V ± 0.8 V or 8.2 V ± 0.8 V].
3. If its output is over 9 V at [1710 kHz], adjust L202 to obtain [9.0 V].

MW antenna coil : L201

4. Connect a loop antenna to "AM LOOP" terminal on the rear panel.
5. Adjust L201 to obtain the best receiving sensitivity on (603 kHz) [600 kHz].

MW antenna trimmer : TC201

6. Adjust TC201 to obtain the best receiving sensitivity on (1404 kHz) [1400 kHz].

3-(4) LW Section

LW oscillator coil : L222

1. Set the frequency display to 144 kHz.
2. Adjust L222 to obtain 1.0 V at test point "TP101".
3. Set the frequench display to 353 kHz and confirm that output at the test point "TP101" is 7.2 V ± 1.2 V.

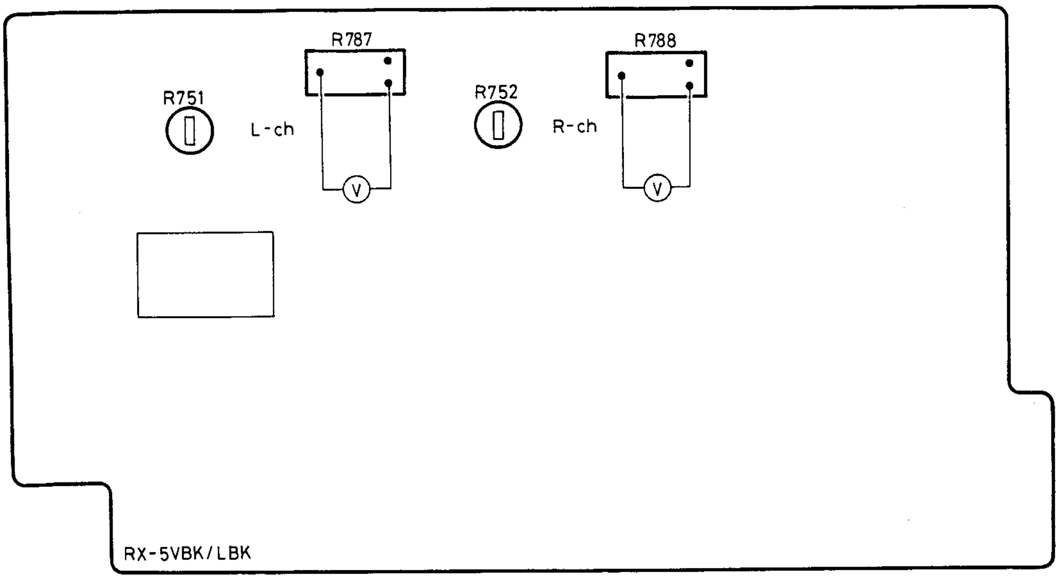
LW antenna coil : L221

4. Connect a loop antenna to "AM LOOP" terminal on the rear panel.
5. Adjust L221 to obtain the best receiving sensitivity on 164 kHz.

LW antenna trimmer : TC221

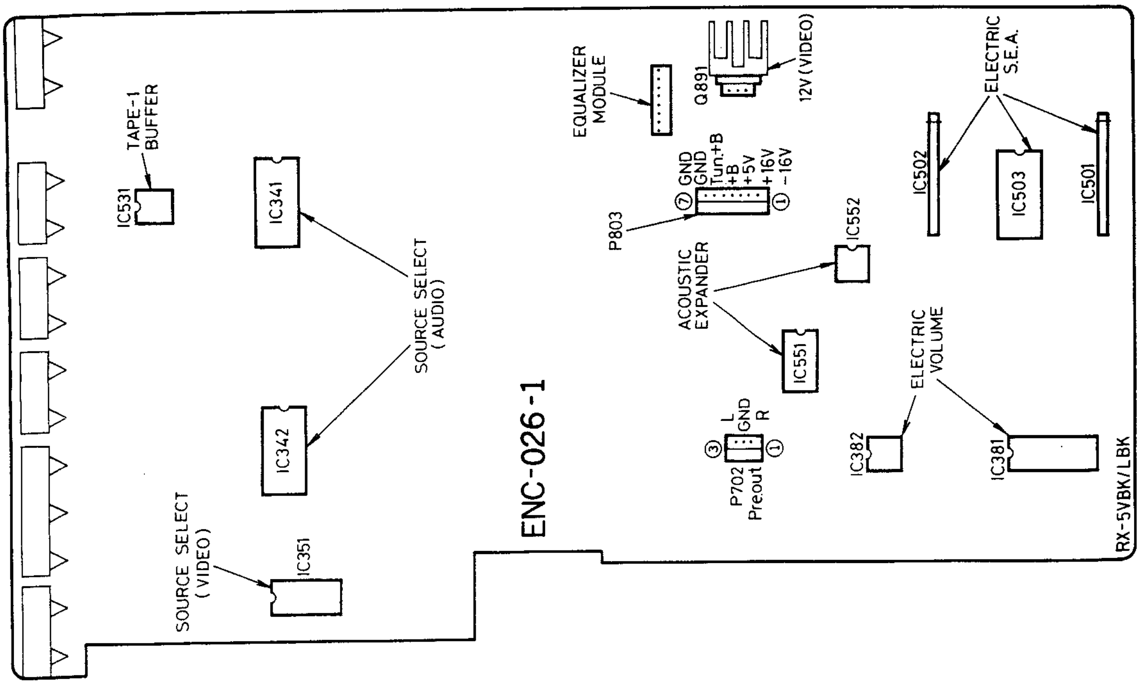
6. Adjust TC221 to obtain the best receiving sensitivity on 353 kHz.

Power Amplifier Idling Current Adjustment


R787
R788
R751
R752
L-ch
R-ch
V
V
RX-5VBK/LBK

1. Turn R751 and R752 fully counterclockwise before the power switch on.
2. Allow the set warm up at least 5 minutes before adjustment.
3. Must keep the heatsink to prevent overheating before adjustment.
4. Set the volume control to minimun during this adjustment.
5. Connect a DC VTVM to R787 resistor's leads for left channel, or to R788's leads for right channel.
6. Adjust R751 for left channel, or R752 for right channel, so that the DC VTVM reads 3~5mV.

Functions of ICs on the Pre-Amplifier PC Board

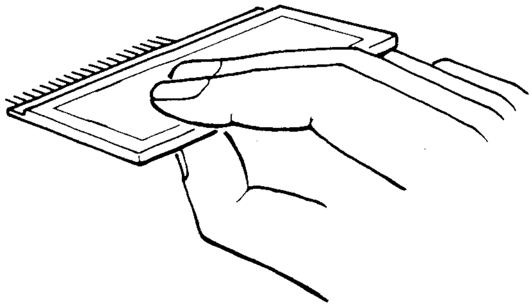

TAPE-1 BUFFER
IC531
IC341
SOURCE SELECT (AUDIO)
IC342
SOURCE SELECT (VIDEO)
IC351
ENC-026-1
EQUALIZER MODULE
Q891
12V (VIDEO)
P803
⑦ GND GND Tun+B +B +5V +16V -16V ①
ACOUSTIC EXPANDER
IC552
IC551
③ L GND R ①
P702 Pre.out
ELECTRIC S.E.A.
IC502
IC503
IC501
ELECTRIC VOLUME
IC382
IC381
RX-5VBK/LBK

Handling precautions of LCD panels

The LCD (Liquid Crystal Display) panel employed in this device requires the following handling precautions.

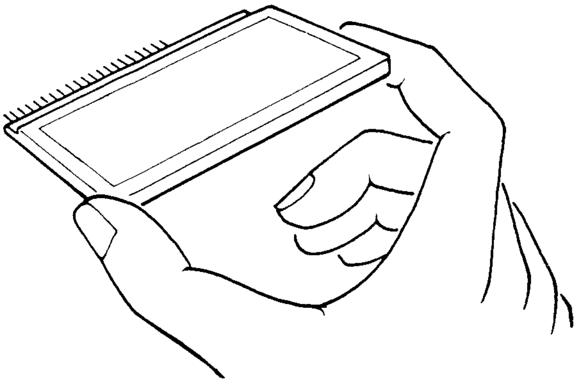
1. Since the LCD is made of plate glass, never apply strong mechanical impact to it.

Do not forcibly press the light-polarizing plate.



×

When handling, grip it as shown in the figure below.



○

2. When handling the LCD, wear gloves whenever possible.
3. When the light-polarizing plate (surface other than silk-printed areas) becomes contaminated, use an applicator wet with isopropyl alcohol to gently wipe it clean. As for the silk-printed areas, use a soft cloth also to gently wipe it clean.

   Note: The light-polarizing plate attached to the LCD surface and silk-printed areas are made of soft material.
4. As much as possible, avoid exposing the LCD to irradiation of harmful light (direct sunlight or ultraviolet rays), especially when the device is not in use.
5. Do not imprint DC voltage on pins of the LCD (characteristics will be degraded).
6. When the LCD is damaged, resulting in leakage of liquid crystal, be very cautious to avoid the liquid from penetrating one's mouth or being swallowed. Should liquid crystal contact the hands or clothing, immediately wash with water, using soap or other appropriate cleanser.

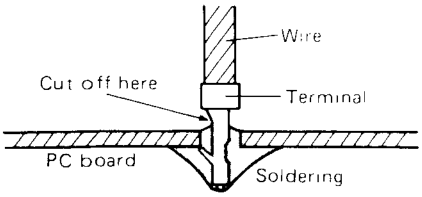
Servicing Method for AWG # 20 Wires with Clamping Terminals

(1) Application objective ⇨ Confirmation of safety
Used to prevent breakage/disconnection troubles of primary and secondary wires within PC boards (or between PC boards). Even when wire breakage/disconnection has actually occurred, a safe air-gap distance between the primary wire and the secondary wire/possibly contacting metal surface can be maintained because the terminal retains the wire sheathing.

(2) Type of wire used
① 1015 AWG-#20 (single-coated)
② 1672 AWG-#20 (double-coated)

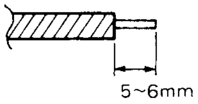
(3) Servicing precautions

① The structural design of this terminal causes its catch to hook onto the PC board, preventing the wire from being easily pulled out. As shown in the figure, use cutting pliers or a similar tool to cut off the ends of the terminal and wire; then remove the remaining terminal clip by melting the soldering.

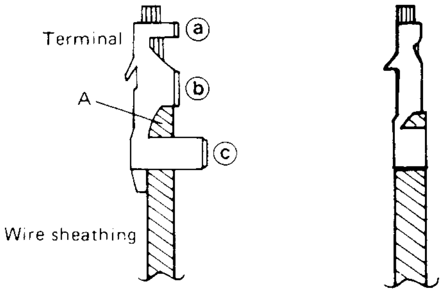


② Prior to soldering the wire onto the PC board, confirm safety by pressure-fitting the terminal to the wire by observing the following procedures.

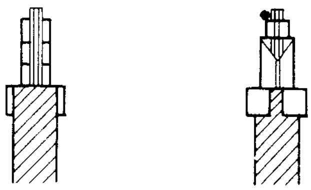
1. Strip off the wire 5 ~ 6 mm from its end.



2. Insert the wire until its sheathing contacts section "A" of the terminal and pressure-fit the terminal clamp at three sections of ⓐ, ⓑ, and ⓒ (section ⓒ is especially important to assure safety. Exercise particular care to achieve secure clamping).

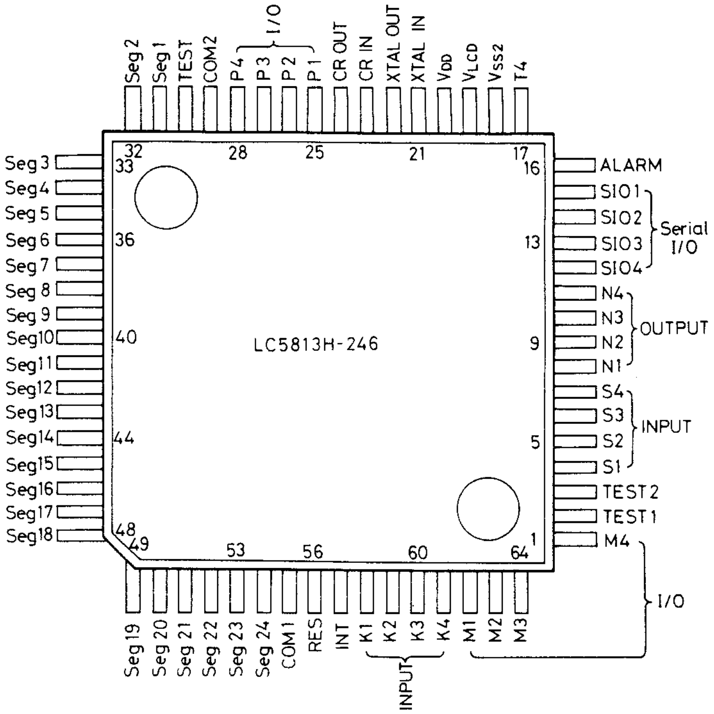


③ Part No., and name
Part No. : 5298T
Name : CRIMP PIN



Internal Block Diagrams of Major ICs

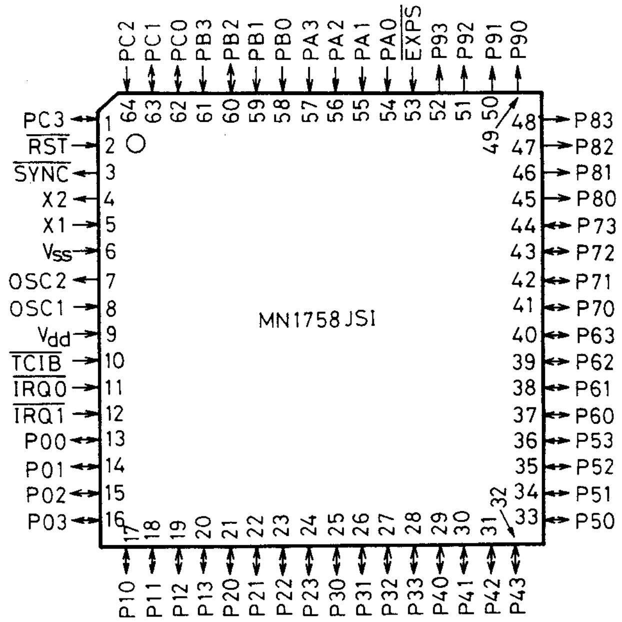
IC421: LC5813H-246


Seg2
Seg1
TEST
COM2
P4
P3
P2
P1
I/O
CR OUT
CR IN
XTAL OUT
XTAL IN
VDD
VLCD
Vss2
T4
32
28
25
21
17
16
ALARM
SIO1
SIO2
SIO3
SIO4
Serial I/O
13
N4
N3
N2
N1
OUTPUT
9
S4
S3
S2
S1
INPUT
5
TEST2
TEST1
M4
1
64
60
56
53
49
48
44
40
36
33
Seg3
Seg4
Seg5
Seg6
Seg7
Seg8
Seg9
Seg10
Seg11
Seg12
Seg13
Seg14
Seg15
Seg16
Seg17
Seg18
LC5813H-246
Seg19
Seg20
Seg21
Seg22
Seg23
Seg24
COM1
RES
INT
K1
K2
K3
K4
M1
M2
M3
INPUT
I/O

IC421:LC5813H-246

Pin No.	Symbol	Name	I/O	Terminal Function
1	M4	M4	O	Key output
2	TEST 1	TEST 1	---	Not use.
3	TEST 2	TEST 2	---	Not use.
4	S1	S1	I	Port for key input;Compose the key matrix with M1~M4.
5	S2	S2	I	Port for key input;Compose the key matrix with M1~M4.
6	S3	S3	I	Port for key input;Compose the key matrix with M1~M4.
7	S4	INH	I	Back-up detection
8	N1	MUTE	O	When Muting ON ,output is "H".
9	N2	MONO	O	When MONO ,output is "H".
10	N3	CATV	O	Display input of CATV
11	N4	$\overline{\text{POWER}}$	O	Not use.(Open)
12	SIO4	STRQ	O	Connect the STRQ of LM7000N.
13	SIO3	CLK	O	Connect the CLK of LM7000N.
14	SIO2	DATA	O	Connect the DATA of LM7000N.
15	SIO1	CE	O	Connect the CE of LM7000N.
16	ALARM	DCS OUT	O	Line data output of DCS.(Positive Logic)
17	T4	T4	---	Not use.
18	Vss2	Vss2	---	GND
19	VLCD	VLCD	---	Voltage reference of LCD.(Light at 0V)
20	VDD	VDD	---	+5V
21	X'tal IN	X'tal IN	---	Not use.
22	X'tal OUT	X'tal OUT	---	Not use.
23	CR IN	CR IN	---	Connect the ceramic oscillator.
24	CR OUT	$\overline{\text{CR}}$ OUT	---	Connect the ceramic oscillator.
25	P1	$\overline{\text{DCS}}$ IN	I	Line data input of DCS.(Negative Logic)
26	P2	$\overline{\text{STOP}}$ IN	I	Input of "AUTO STOP"
27	P3	$\overline{\text{SIGNAL}}$ IN	I	Input of "TUNED" display
28	P4	$\overline{\text{STEREO}}$ IN	I	Input of "STEREO" display
29	COM2	COM2	O	Common 2 of LCD
30	TEST	TEST	---	Not use.
31~54	SEG1~24	SEG1~24	O	1~24 segments of LCD
55	COM1	$\overline{\text{COM1}}$	O	Common 1 of LCD
56	RES	$\overline{\text{RES}}$	I	Input of RESET
57	INT	$\overline{\text{INT}}$	I	Input of Interrupt
58	K1	K1	I	Key input;Compose the key matrix with M1~M4.
59	K2	K2	I	Key input;Compose the key matrix with M1~M4.
60	K3	K3	I	Key input;Compose the key matrix with M1~M4.
61	K4	K4	I	Key input;Compose the key matrix with M1~M4.
62	M1	M1	O	Key output
63	M2	M2	O	Key output
64	M3	M3	O	Key output

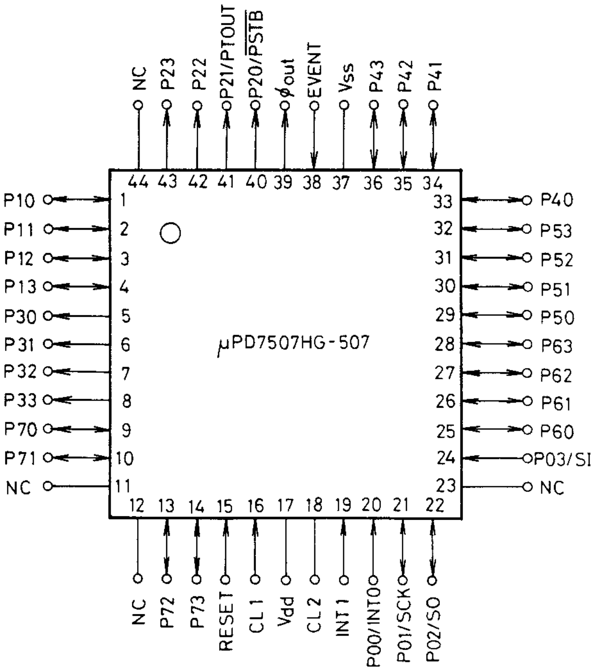
IC461: MN1758JSI


PC2
PC1
PC0
PB3
PB2
PB1
PB0
PA3
PA2
PA1
PA0
EXPS
P93
P92
P91
P90
64
63
62
61
60
59
58
57
56
55
54
53
52
51
49 50
48
47
46
45
44
43
42
41
40
39
38
37
36
35
34
32 33
P83
P82
P81
P80
P73
P72
P71
P70
P63
P62
P61
P60
P53
P52
P51
P50
PC3
RST
SYNC
X2
X1
Vss
OSC2
OSC1
Vdd
TCIB
IRQ0
IRQ1
P00
P01
P02
P03
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
P10
P11
P12
P13
P20
P21
P22
P23
P30
P31
P32
P33
P40
P41
P42
P43
MN1758JSI

IC461:MN1758JSI

Pin No.	Symbol	Name	I/O	Terminal Function
1	PC3	DATA1	0	Serial data out;Connect to DATA terminal of TC9164N, TC9163N,TC9177P.
2	$\overline{\text{RST}}$	$\overline{\text{RESET}}$	I	RESET signal input
3~5	---	---	---	Not use.
6	Vss	Vss	---	GND
7	OSC2	OSC OUT	0	Connect the Ceramic Oscillator.
8	OSC1	OSC IN	I	Connect the Ceramic Oscillator.
9	Vdd	Vdd	---	+5V
10	$\overline{\text{TCIB}}$	$\overline{\text{TCIB}}$	---	Not use.(GND)
11	$\overline{\text{IRQ0}}$	$\overline{\text{INH}}$ in	I	$\overline{\text{INH}}$ signal input
12	$\overline{\text{IRQ1}}$	$\overline{\text{IRQ1}}$	---	Not use.(GND)
13	P00	$\overline{\text{RM}}$ in	I	Remote control signal input
14	P01	$\overline{\text{INH}}$ in	I	$\overline{\text{INH}}$ signal input
15	P02	$\overline{\text{DCS}}$ in	I	DCS signal input
16	P03	$\overline{\text{DCS}}$ out	0	DCS signal output
17	P10	RM IND out	0	"H" output when Remote control signal input.
18	P11	LCD C/D	0	Connect the C/D terminal of μPD7225G.
19	P12	LCD $\overline{\text{CD}}$	0	Connect the $\overline{\text{CD}}$ terminal of μPD7225G.
20~21	---	---	---	Not use.(pull down)
22	P21	MUT	0	"L" output when TUNER Source selected.
23~28	---	---	---	Not use.(pull down)
29	P40	INH out1	0	"H" output when power "ON".
30	P41	INH out2	0	Connect the $\overline{\text{INH}}$ terminal of μPD7507HG-507.
31	P42	RESET	0	Connect the RESET terminal of μPD7507HG-507.
32	P43	RESET	0	Connect the RESET terminal of μPD7225G.
33	P50	VC 0	0	"H" output when VIDEO 1 selected.
34	P51	VC 1	0	"H" output when VIDEO 2 selected.
35	P52	VC 2	0	"H" output when VCR selected.
36~39	---	---	---	Not use.(pull down)
40	P63	A-EXP	0	"H" output when Acoustic Expander ON.
41~43	---	---	---	Not use.(pull down)
44	P73	ST-3	0	Connect the strobe terminal of TC9164N,TC9163N,TC9177P.
45~52	---	---	0	Key output;Composed the key matrix with PA0 → PA3.
53	$\overline{\text{EXPS}}$	$\overline{\text{EXPS}}$	---	Not use.(open)
54~57	---	---	I	Key input
58	PB0	$\overline{\text{BUSY}}$	I/0	Connect the $\overline{\text{BUSY}}$ terminal of μPD7225G.
59	PB1	TEST	0	Volume UP/DOWN test mode
60	PB2	CLK2	0	Serial clock out;Connect the SCK terminal of μPD7225G.
61	PB3	PB3	---	Not use.(GND)
62	PC0	DATA2	---	Serial DATA out;Connect the $\overline{\text{SI}}$ terminal of μPD7225G.
63	PC1	CLK1	---	Serial CLOCK out;Connect the CLK terminal of TC9164N, TC9163N,TC9177P.
64	PC2	PC2	---	Not use.(GND)

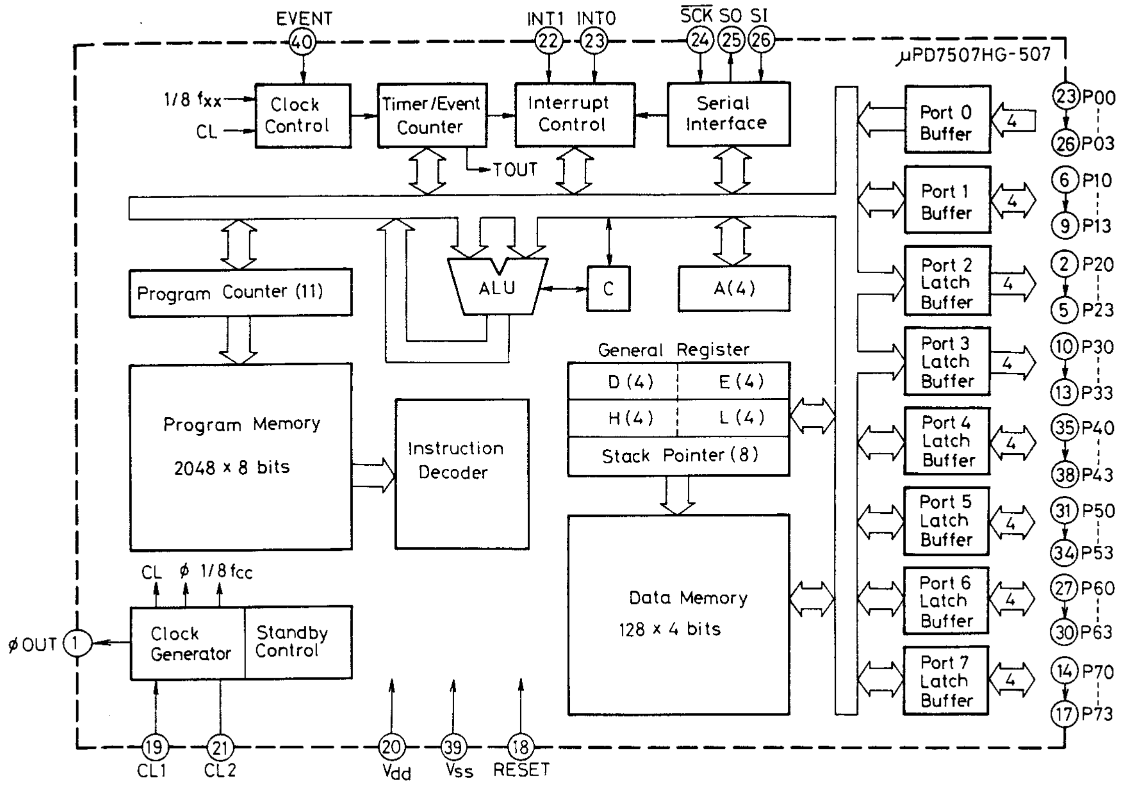
IC441: μPD7507HG-507


NC
P23
P22
P21/PTOUT
P20/PSTB
φout
EVENT
Vss
P43
P42
P41
44 43 42 41 40 39 38 37 36 35 34
P10 1
P11 2
P12 3
P13 4
P30 5
P31 6
P32 7
P33 8
P70 9
P71 10
NC 11
μPD7507HG-507
33 P40
32 P53
31 P52
30 P51
29 P50
28 P63
27 P62
26 P61
25 P60
24 P03/SI
23 NC
12 13 14 15 16 17 18 19 20 21 22
NC
P72
P73
RESET
CL1
Vdd
CL2
INT1
P00/INT0
P01/SCK
P02/SO

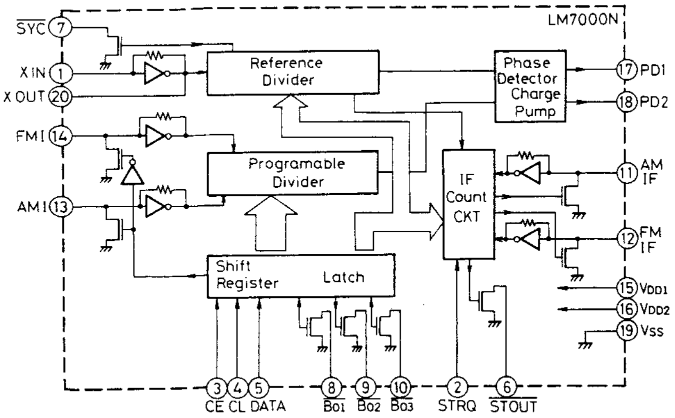
IC441: μ PD7507HG−507

Pin No.	Symbol	Name	I/O	Terminal Function
1	P10	P10	I	Key input;Composed the key matrix with P30 → P33.
2	P11	P11	I	Key input;Composed the key matrix with P30 → P33.
3	P12	P12	I	Key input;Composed the key matrix with P30 → P33.
4	P13	P13	I	Key input;Composed the key matrix with P30 → P33.
5	P30	P30	O	Key output
6	P31	P31	O	Key output
7	P32	P32	O	Key output
8	P33	P33	O	Key output
9	P70	P70	I	Key input;Composed the key matrix with P30 → P33.
10	P71	P71	I	Key input;Composed the key matrix with P30 → P33.
11	NC	NC	---	Non connection
12	NC	NC	---	Non connection
13	P72	P72	I	Key input;Composed the key matrix with P30 → P33.
14	P73	P73	I	Key input;Composed the key matrix with P30 → P33.
15	RESET	RESET	I	Connect the RESET of MN1758JSI.
16	CL1	X'tal in	I	Connect the ceramic oscillator.
17	Vdd	Vdd	---	+5V
18	CL2	X'tal out	O	Connect the ceramic oscillator.
19	INT1	INT1	---	Not use.(GND)
20	P00/INT1	RM IN	I	Remote control signal input
21	P01/SCK	P01/SCK	---	Not use.(Vdd)
22	P02/SO	INH	I	Connect the INH2 of MN1758JSI.
23	NC	NC	---	Non connection.
24	P03/SI	TEST	I	SEA volume UP/DOWN test mode ·
25	P60	CLK	O	Serial CLOCK OUT
26	P61	DATA	O	Serial DATA OUT
27	P62	RM IND	O	"H" output when remote control signal received.
28	P63	P63	---	Not use.(open)
29	P50	P50	---	Not use.(GND)
30	P51	P51	---	Not use.(GND)
31	P52	P52	---	Not use.(GND)
32	P53	P53	---	Not use.(GND)
33	P40	P40	---	Not use.(GND)
34	P41	P41	---	Not use.(GND)
35	P42	P42	---	Not use.(GND)
36	P43	P43	---	Not use.(GND)
37	Vss	Vss	---	GND
38	EVENT	EVENT	---	Not use.(GND)
39	φ OUT	φ OUT	---	Not use.(open)
40	P20	P20	---	Not use.(open)
41	P21	P21	---	Not use.(open)
42	P22	P22	---	Not use.(open)
43	P23	P23	---	Not use.(open)
44	NC	NC	---	Non connect.

IC441: μPD7507HG-507


EVENT
40
INT1 INT0
22 23
SCK SO SI
24 25 26
μPD7507HG-507
1/8 fxx
CL
Clock Control
Timer/Event Counter
Interrupt Control
Serial Interface
TOUT
Port 0 Buffer
Port 1 Buffer
Port 2 Latch Buffer
Port 3 Latch Buffer
Port 4 Latch Buffer
Port 5 Latch Buffer
Port 6 Latch Buffer
Port 7 Latch Buffer
4
23 P00
26 P03
6 P10
9 P13
2 P20
5 P23
10 P30
13 P33
35 P40
38 P43
31 P50
34 P53
27 P60
30 P63
14 P70
17 P73
Program Counter (11)
ALU
C
A(4)
General Register
D (4)
E (4)
H (4)
L (4)
Stack Pointer (8)
Program Memory
2048 × 8 bits
Instruction Decoder
Data Memory
128 × 4 bits
CL
ϕ
1/8 fcc
ϕOUT 1
Clock Generator
Standby Control
19 CL1
21 CL2
20 Vdd
39 Vss
18 RESET

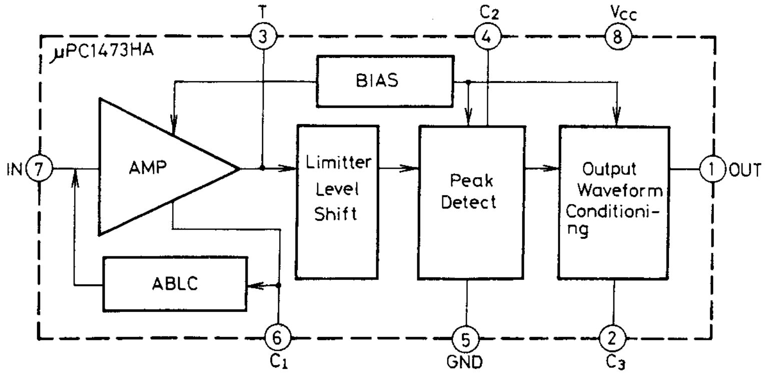
IC241: LM7000N


LM7000N
SYC 7
XIN 1
XOUT 20
FMI 14
AMI 13
Reference Divider
Programable Divider
Shift Register
Latch
Phase Detector Charge Pump
IF Count CKT
17 PD1
18 PD2
11 AM IF
12 FM IF
15 VDD1
16 VDD2
19 Vss
3 CE
4 CL
5 DATA
8 B01
9 B02
10 B03
2 STRQ
6 STOUT

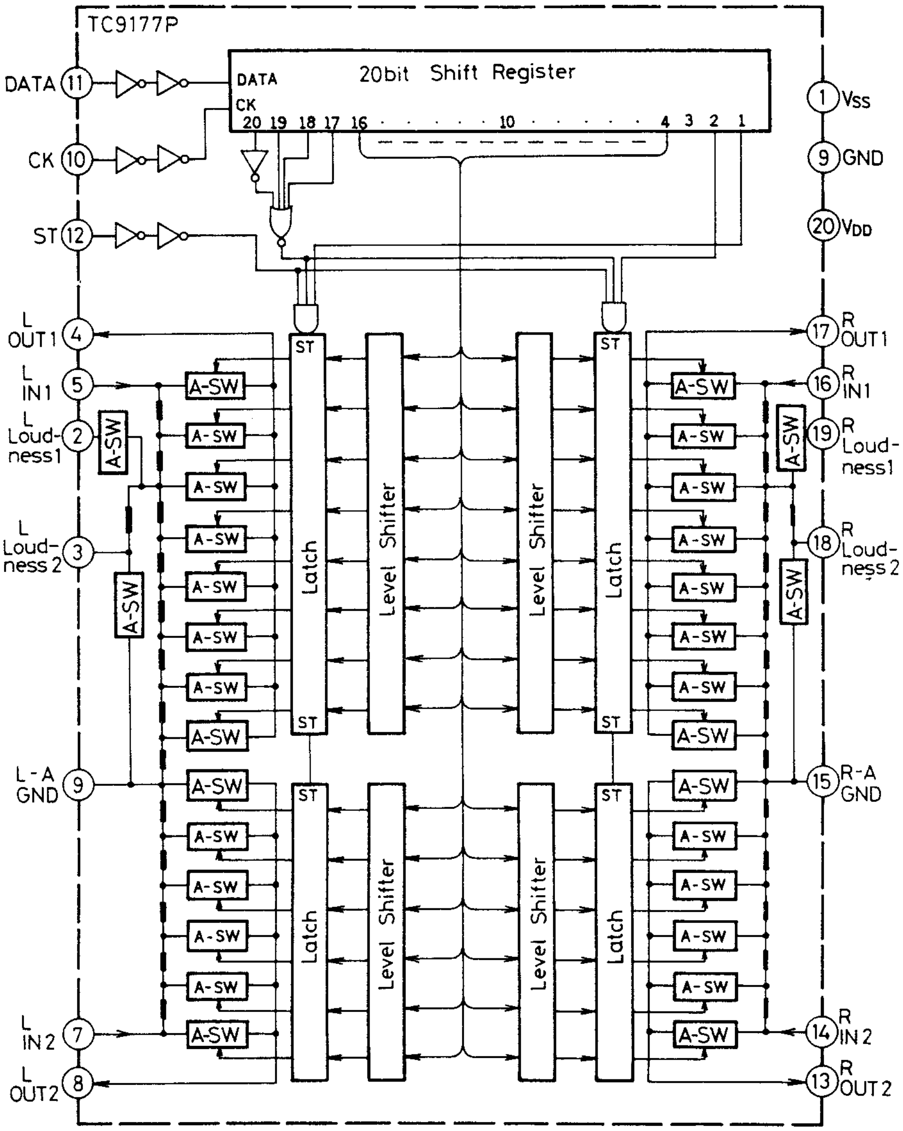
IC241: LM7000N

Terminal Name	Function
SYC	Clock(400kHz) for controller
XIN, XOUT	Crystal oscillator(3.6MHz) Included the feedback resistor.
FMI, AMI	Local oscillator signal input
CE, CL, DATA	Data input
B01, B02, B03	Band data output
STRQ	Request of IF counter input
STOUT	Auto-search stop signal output
V dd1, V dd2, V ss	Power supply(V dd2:for back-up)
AMIF, FMIF	IF signal input
PD1, PD2	Charge pump output

IC481: μPC1473HA


μPC1473HA
T
3
C2
4
Vcc
8
BIAS
IN 7
AMP
Limitter Level Shift
Peak Detect
Output Waveform Conditioning
1 OUT
ABLC
6 C1
5 GND
2 C3

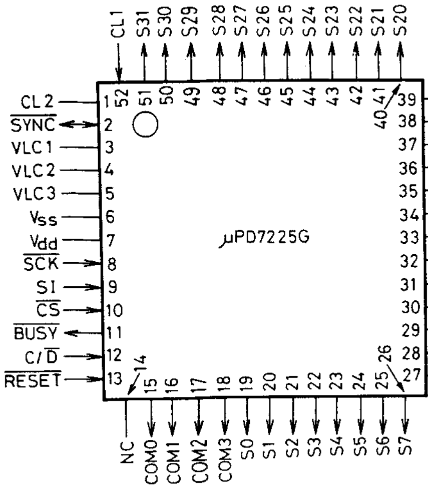
IC381: TC9177P


TC9177P
20bit Shift Register
DATA
CK
20 19 18 17 16 · · · · · · 10 · · · · · · 4 3 2 1
DATA 11
CK 10
ST 12
1 Vss
9 GND
20 VDD
L OUT1 4
L IN1 5
L Loud-ness1 2
L Loud-ness 2 3
L-A GND 9
L IN 2 7
L OUT2 8
17 R OUT1
16 R IN1
19 R Loud-ness1
18 R Loud-ness 2
15 R-A GND
14 R IN 2
13 R OUT 2
A-SW
ST
Latch
Level Shifter

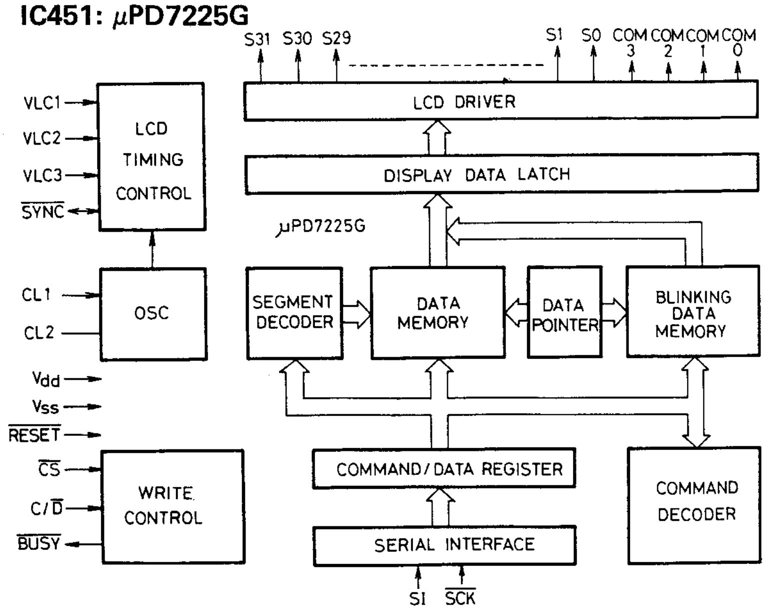
IC381 : TC9177P

Pin No.	Symbol	Function
1	V ss	(-)Power Supply
2	L-Loudness1	Terminal for Loudness (L-ch)
3	L-Loudness2	Terminal for Loudness (L-ch)
4	L-OUT1	10dB Step Attenuator Output
5	L-IN 1	10dB Attenuator Input
6	A-GND	Ground (Power Supply)
7	L-IN 2	2dB Attenuator Input
8	L-OUT2	2dB Step Attenuator Output
9	GND	Ground (Signal)
10	CK	Clock Input
11	DATA	Data Input
12	ST	Strobe Input
13	R-OUT2	2dB Step Attenuator Output
14	R-IN 2	2dB Attenuator Input
15	A-GND	Ground (Power Supply)
16	R-IN 1	10dB Attenuator Input
17	R-OUT1	10dB Step Attenuator Output
18	R-Loudness2	Terminal for Loudness (R-ch)
19	R-Loudness1	Terminal for Loudness (R-ch)
20	V dd	(+)Power Supply

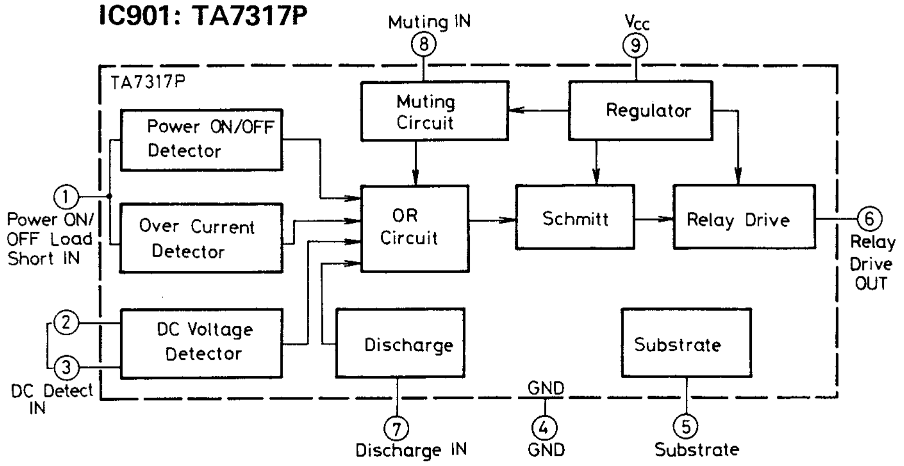
IC451: μPD7225G


μPD7225G
CL1 S31 S30 S29 S28 S27 S26 S25 S24 S23 S22 S21 S20
52 51 50 49 48 47 46 45 44 43 42 41 40
CL2 1
SYNC 2
VLC1 3
VLC2 4
VLC3 5
Vss 6
Vdd 7
SCK 8
SI 9
CS 10
BUSY 11
C/D 12
RESET 13
39 S19
38 S18
37 S17
36 S16
35 S15
34 S14
33 Vdd
32 S13
31 S12
30 S11
29 S10
28 S9
27 S8
14 15 16 17 18 19 20 21 22 23 24 25 26
NC COM0 COM1 COM2 COM3 S0 S1 S2 S3 S4 S5 S6 S7

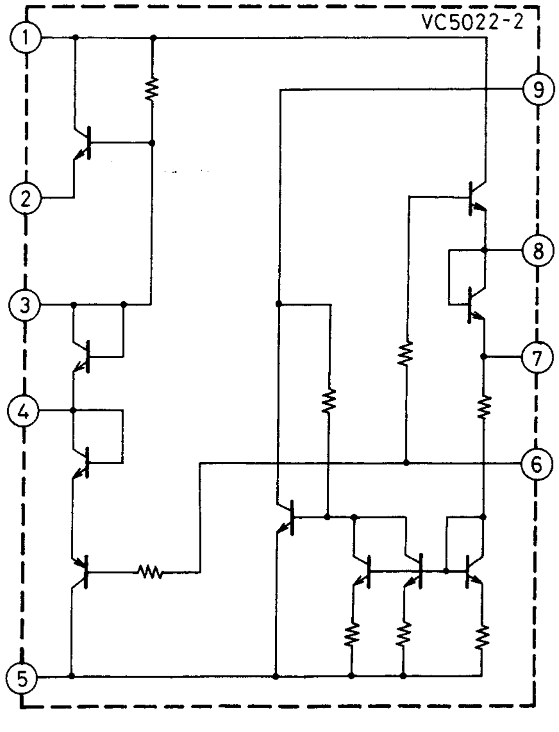
IC451: μPD7225G


S31 S30 S29
S1 S0 COM 3 COM 2 COM 1 COM 0
LCD DRIVER
DISPLAY DATA LATCH
VLC1
VLC2
VLC3
SYNC
LCD TIMING CONTROL
μPD7225G
CL1
CL2
OSC
SEGMENT DECODER
DATA MEMORY
DATA POINTER
BLINKING DATA MEMORY
Vdd
Vss
RESET
CS
C/D
BUSY
WRITE CONTROL
COMMAND/DATA REGISTER
SERIAL INTERFACE
COMMAND DECODER
SI
SCK

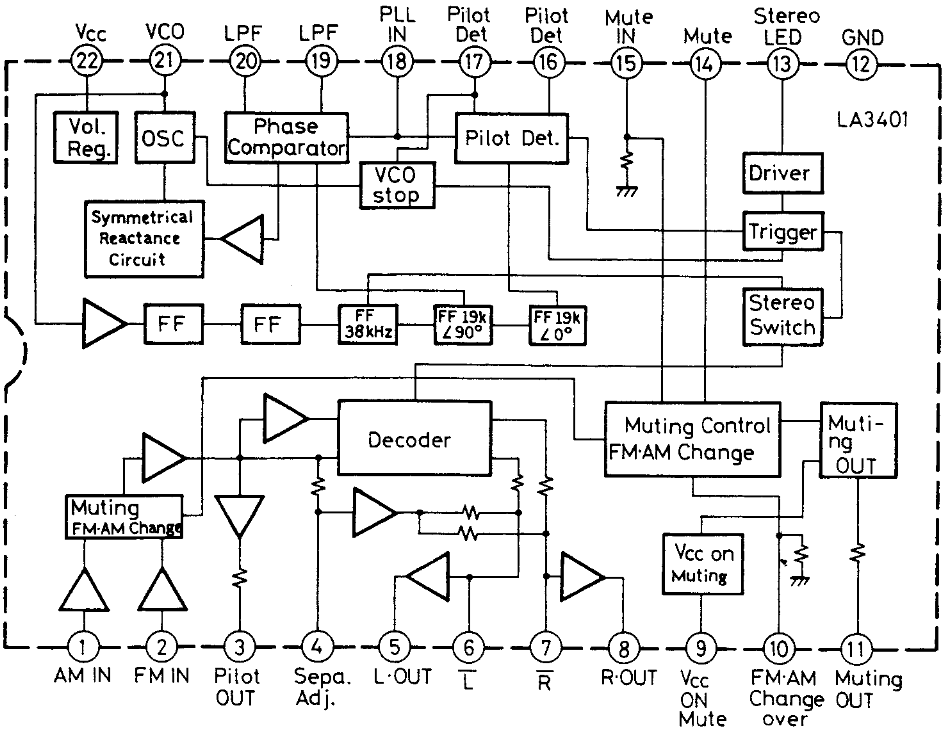
IC901: TA7317P


Muting IN
⑧
Vcc
⑨
TA7317P
Power ON/OFF Detector
Muting Circuit
Regulator
①
Power ON/OFF Load Short IN
Over Current Detector
OR Circuit
Schmitt
Relay Drive
⑥
Relay Drive OUT
②
③
DC Detect IN
DC Voltage Detector
Discharge
Substrate
GND
⑦
Discharge IN
④
GND
⑤
Substrate

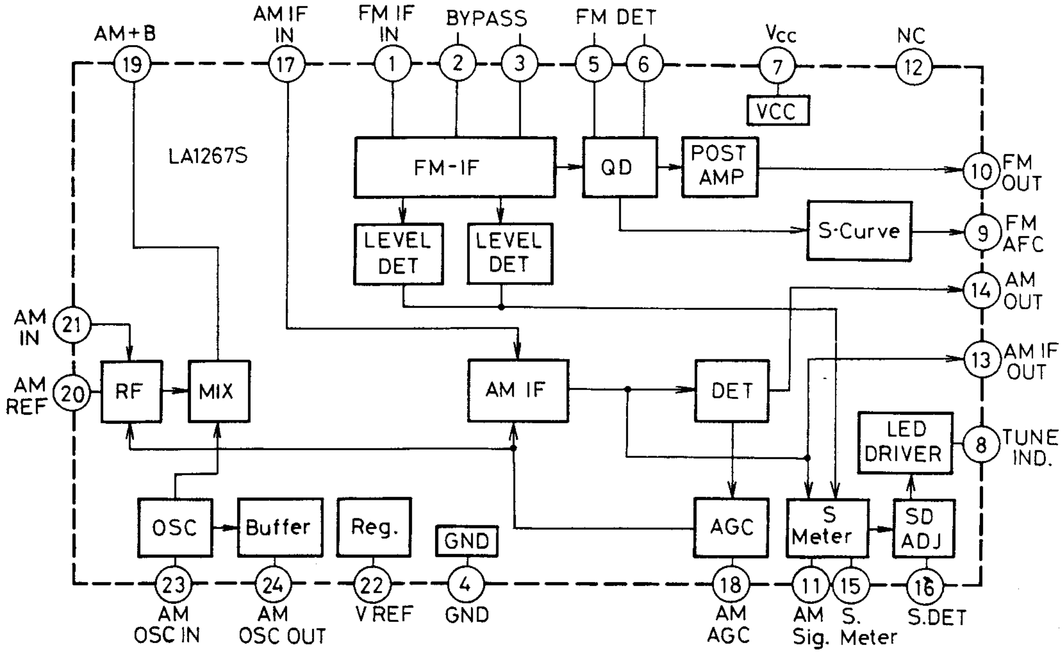
IC751, IC75: VC5022-2


VC5022-2
①
②
③
④
⑤
⑥
⑦
⑧
⑨

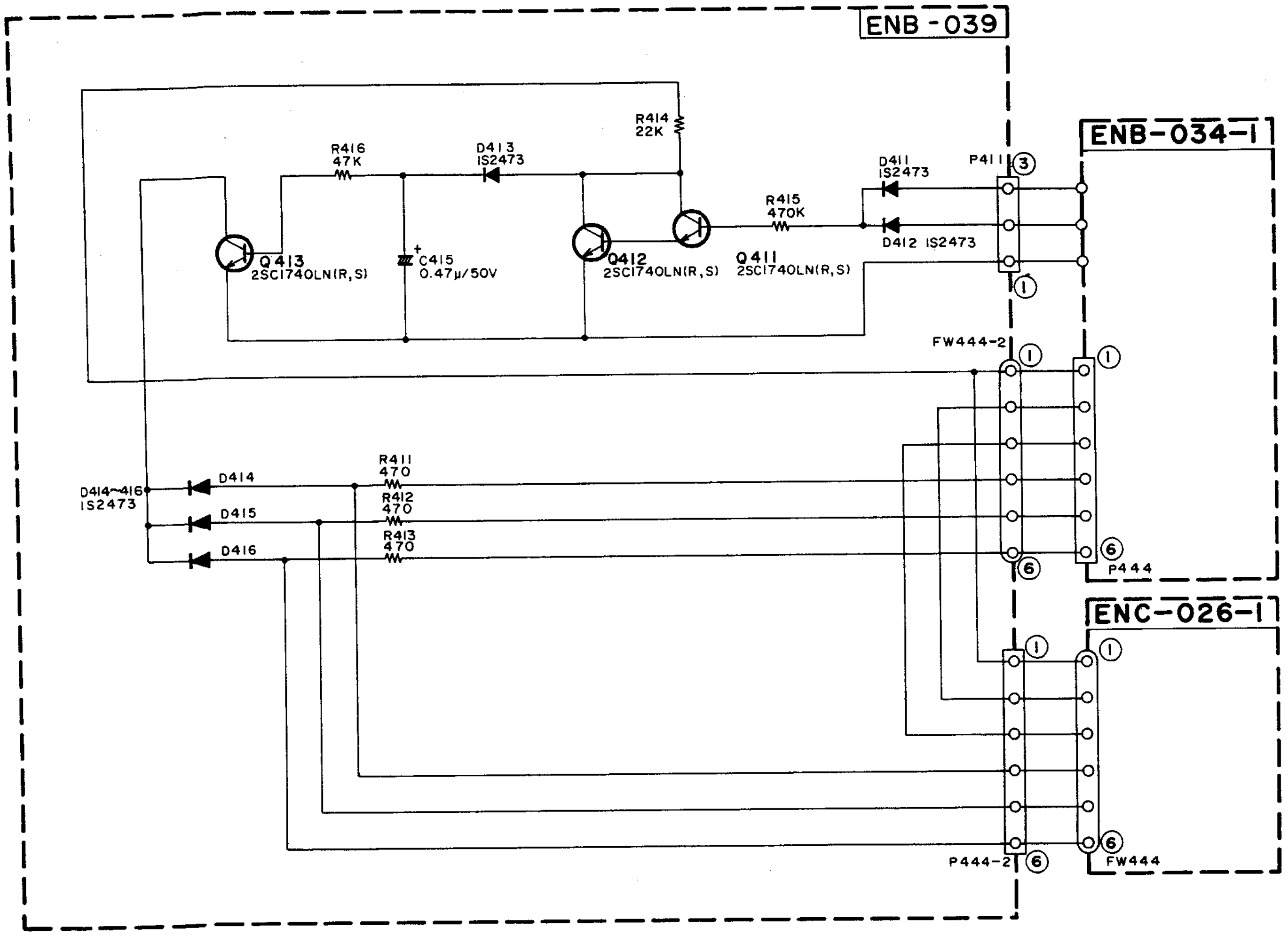
IC171: LA3401


Vcc
VCO
LPF
LPF
PLL IN
Pilot Det
Pilot Det
Mute IN
Mute
Stereo LED
GND
22
21
20
19
18
17
16
15
14
13
12
LA3401
Vol. Reg.
OSC
Phase Comparator
Pilot Det.
VCO stop
Driver
Trigger
Symmetrical Reactance Circuit
FF
FF
FF 38kHz
FF 19k ∠90°
FF 19k ∠0°
Stereo Switch
Decoder
Muting Control FM·AM Change
Muti-ng OUT
Muting FM·AM Change
Vcc on Muting
1
2
3
4
5
6
7
8
9
10
11
AM IN
FM IN
Pilot OUT
Sepa. Adj.
L·OUT
L̄
R̄
R·OUT
Vcc ON Mute
FM·AM Change over
Muting OUT

IC131: LA1267S

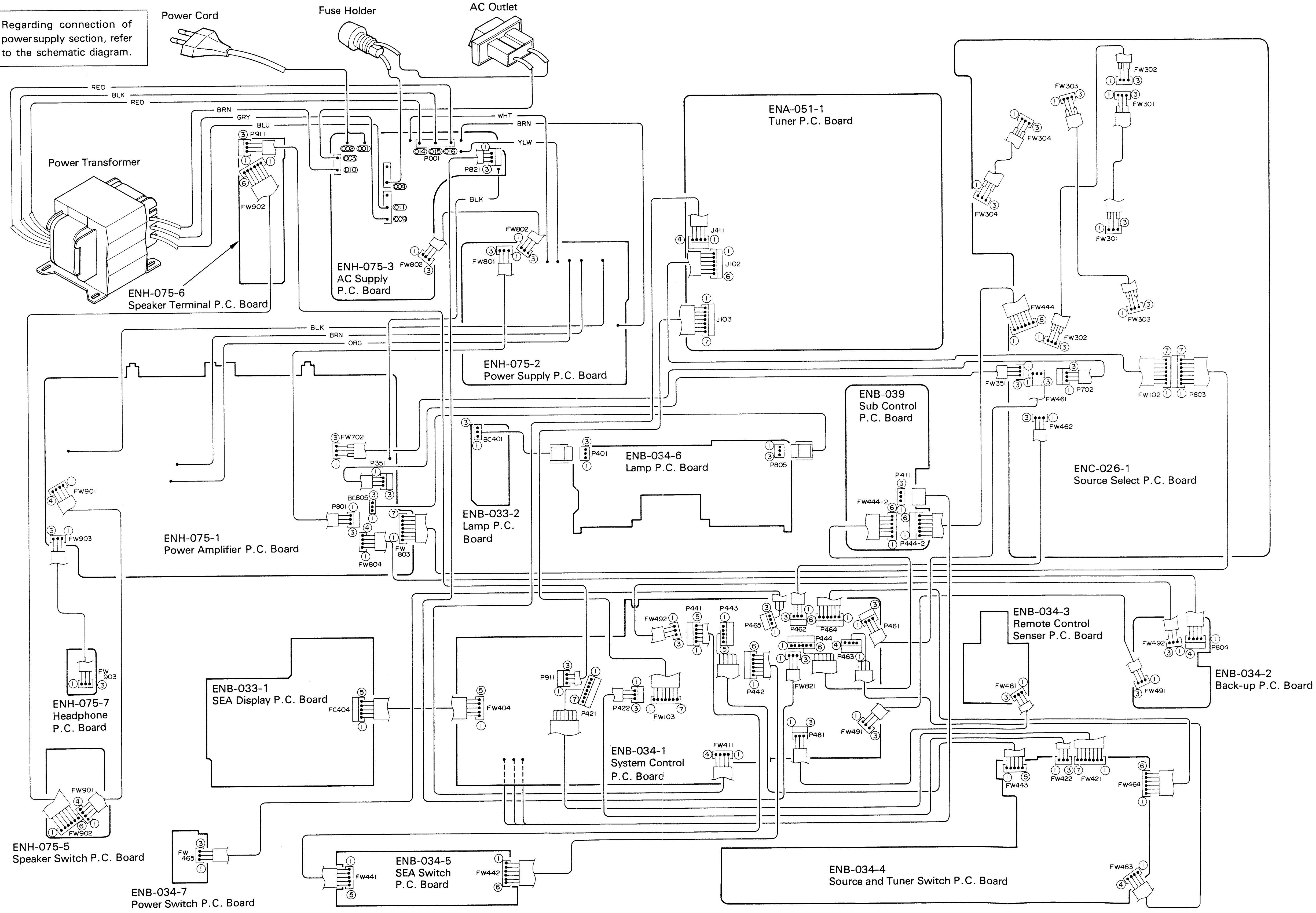

AM+B
AM IF IN
FM IF IN
BYPASS
FM DET
Vcc
NC
19
17
1
2
3
5
6
7
12
VCC
LA1267S
FM-IF
QD
POST AMP
10
FM OUT
S-Curve
9
FM AFC
LEVEL DET
LEVEL DET
14
AM OUT
13
AM IF OUT
AM IN
21
AM REF
20
RF
MIX
AM IF
DET
LED DRIVER
8
TUNE IND.
OSC
Buffer
Reg.
GND
AGC
S Meter
SD ADJ
23
24
22
4
18
11
15
16
AM OSC IN
AM OSC OUT
V REF
GND
AM AGC
AM Sig.
S. Meter
S.DET

(6) Sub Control Section


ENB-039
R414
22K
R416
47K
D413
IS2473
D411
IS2473
P411
③
R415
470K
Q413
2SC1740LN(R,S)
C415
0.47µ/50V
Q412
2SC1740LN(R,S)
Q411
2SC1740LN(R,S)
D412 IS2473
①
ENB-034-1
FW444-2
①
①
D414~416
IS2473
D414
D415
D416
R411
470
R412
470
R413
470
⑥
⑥
P444
ENC-026-1
①
①
⑥
P444-2
⑥
FW444

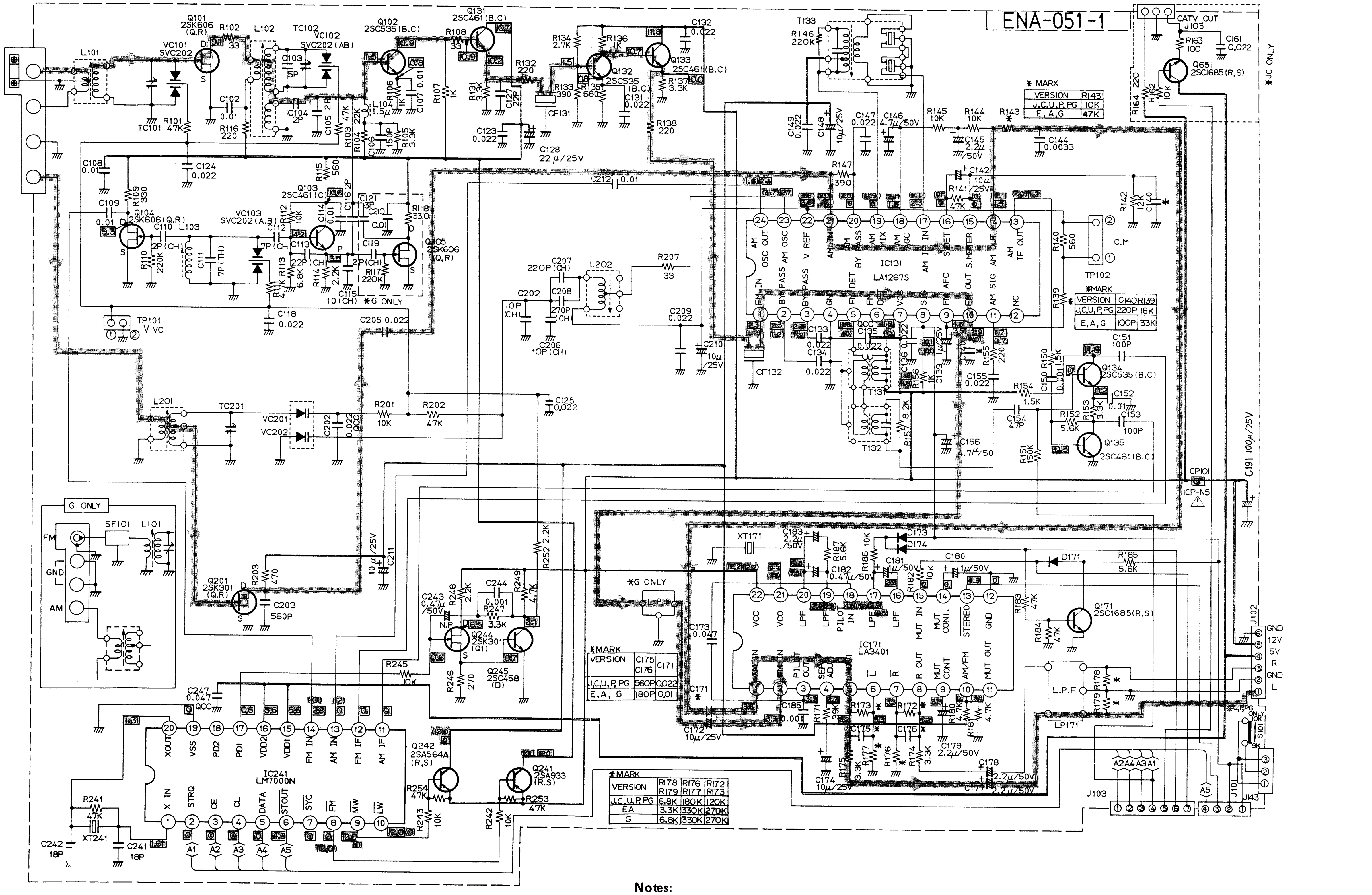
Connection Diagram

Note : Regarding connection of powersupply section, refer to the schematic diagram.


Power Cord
Fuse Holder
AC Outlet
RED
BLK
RED
BRN
GRY
BLU
WHT
BRN
YLW
BLK
Power Transformer
P911
FW902
P001
P821
FW802
FW801
ENH-075-3
AC Supply
P.C. Board
ENH-075-6
Speaker Terminal P.C. Board
ENA-051-1
Tuner P.C. Board
J411
J102
J103
FW302
FW303
FW301
FW304
FW444
FW302
FW303
BLK
BRN
ORG
ENH-075-2
Power Supply P.C. Board
FW351
FW461
P702
FW102
P803
FW462
ENB-039
Sub Control
P.C. Board
FW702
P351
BC401
P401
ENB-034-6
Lamp P.C. Board
P805
ENC-026-1
Source Select P.C. Board
P411
FW444-2
P444-2
FW901
BC805
P801
FW903
ENH-075-1
Power Amplifier P.C. Board
FW804
FW 803
ENB-033-2
Lamp P.C.
Board
P441
P443
FW492
P465
P462
P464
P461
P444
P463
ENB-034-3
Remote Control
Senser P.C. Board
FW492
P804
ENB-034-2
Back-up P.C. Board
FW491
FW481
FW 903
ENH-075-7
Headphone
P.C. Board
ENB-033-1
SEA Display P.C. Board
FC404
FW404
P911
P421
P422
FW103
P442
FW821
P481
FW491
ENB-034-1
System Control
P.C. Board
FW411
FW443
FW422
FW421
FW464
FW901
FW902
ENH-075-5
Speaker Switch P.C. Board
FW 465
ENB-034-7
Power Switch P.C. Board
FW441
ENB-034-5
SEA Switch
P.C. Board
FW442
ENB-034-4
Source and Tuner Switch P.C. Board
FW463

Schematic Diagrams

(1) FM/AM Tuner Section

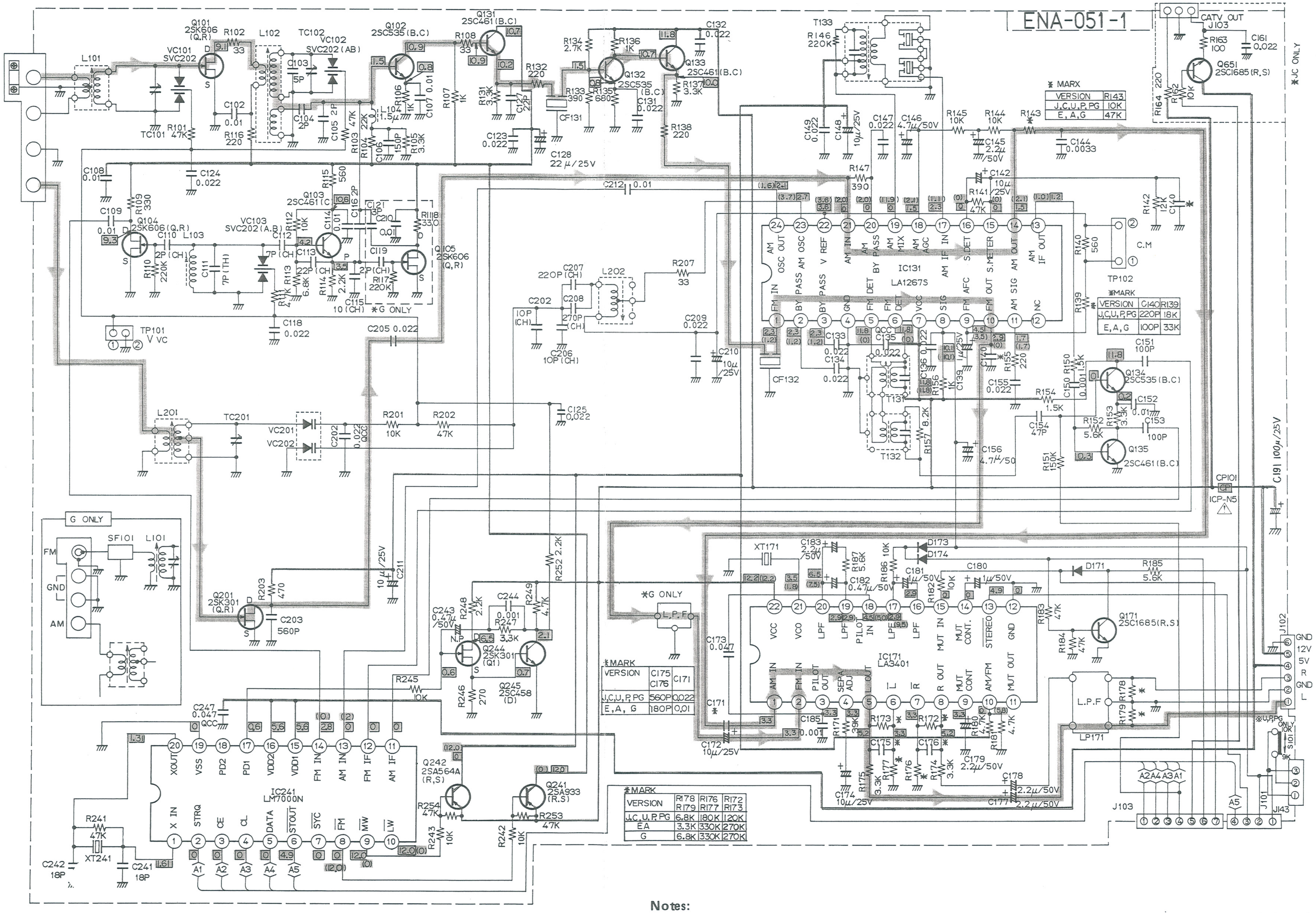

ENA-051-1
IC131 LA1267S
IC171 LA3401
IC241 LM7000N
*MARX
VERSION R143
J,C,U,P,PG 10K
E,A,G 47K
*MARK
VERSION C140 R139
J,C,U,P,PG 220P 18K
E,A,G 100P 33K
*MARK
VERSION C175 C176 C171
J,C,U,P,PG 560P 0.022
E,A,G 180P 0.01
*MARK
VERSION R178 R179 R176 R177 R172 R173
J,C,U,P,PG 6.8K 180K 120K
EA 3.3K 330K 270K
G 6.8K 330K 270K
*G ONLY
G ONLY
*JC ONLY
CATV OUT
FM
GND
AM
J102 GND 12V 5V R GND L
J103
J101
J143
CP101 ICP-N5
T133
T131
T132
TP101 V VC
TP102
C.M
L.P.F
LP171
XT171
XT241

Notes:

1. ——— indicates positive B power supply.
2. - - - - - - indicates signal path.
3. [▨] / [▨] shows DC voltage to the chassis with no signal input.
   [▨] . . . FM [▨] AM
4. When replacing the parts in the darkened area (▨) and those marked with ⚠, be sure to use the designated parts to ensure safety.
5. This is the standard circuit diagram.
   The design and contents are subject to change without notice.

Schematic Diagrams

(1) FM/AM Tuner Section


ENA-051-1
L101
Q101 2SK606 (Q,R)
R102 33
L102
TC102
VC102 SVC202 (AB)
VC101 SVC202
Q102 2SC535 (B,C)
Q131 2SC461 (B,C)
R108 33
R134 2.7K
R136 1K
Q132 2SC535 (B,C)
Q133 2SC461 (B,C)
C132 0.022
R137 3.3K
R138 220
T133
R146 220K
C161 0.022
CATV OUT
J103
R163 100
Q651 2SC1685 (R,S)
R164 220
R162 10K
*JC ONLY
C102 0.01
C103 5P
C104 2P
C105 2P
R116 220
TC101
R101 47K
R106 1K
C107 0.01
R107 1K
R131
R132 220
C127 22P
R133 390
R135 680
C131 0.022
CF131
C123 0.022
C128 22μ/25V
C149 0.022
C148 10μ/25V
C147 0.022
C146 4.7μ/50V
R145 10K
R144 10K
R143
C145 2.2μ/50V
C144 0.0033
R147 390
C142 10μ/25V
R141 47K
C108 0.01
R109 330
C109 0.01
C124 0.022
Q104 2SK606 (Q,R)
VC103 SVC202 (A,B)
Q103 2SC461 (C)
R115 560
R118 330
Q105 2SK606 (Q,R)
C110 L103
C111 7P (TH)
C112 7P (CH)
C113 22P (CH)
R110 220K
R113 6.8K
R114 2.2K
R117 220K
C115 10 (CH)
*G ONLY
C118 0.022
TP101 V VC
C212 0.01
C205 0.022
C207 220P (CH)
L202
R207 33
C202 10P (CH)
C208 270P (CH)
C206 10P (CH)
C209 0.022
C210 10μ/25V
CF132
IC131 LA1267S
OSC OUT
BY PASS AM OSC
BY PASS V REF
AM IN
AM BY PASS
FM MIX
AM AGC
AM IF IN
S.DET
S.METER
AM OUT
AM SIG AM
AM IF OUT
FM IN
GND
FM DET
FM DET
VCC
FM SIG
AFC
FM OUT
NC
R140 560
R142 12K
C140
C.M
TP102
R139
C133 0.022
C134 0.022
C135 0.022
T131
T132
R157 8.2K
C156 4.7μ/50
C155 0.022
R155 220
R154 1.5K
C154 47P
R150 1.5K
C150 0.001
C151 100P
Q134 2SC535 (B,C)
C152 0.01
R152 5.6K
R153 3.3K
C153 100P
Q135 2SC461 (B,C)
R151 150K
C191 100μ/25V
CP101 ICP-N5
L201
TC201
VC201
VC202
C202 0.022
R201 10K
R202 47K
C125 0.022
G ONLY
FM
GND
AM
SF101
L101
Q201 2SK301 (Q,R)
R203 470
C203 560P
C211 10μ/25V
R252 2.2K
*G ONLY
L.P.F
XT171
C183 2.2μ/50V
R187 5.6K
R186 10K
C181 1μ/50V
C182 0.47μ/50V
R182 10K
D173
D174
C180 1μ/50V
D171
R185 5.6K
R183 47K
R184 47K
Q171 2SC1685 (R,S)
IC171 LA3401
VCC
VCO
LPF
PILOT IN
MUT IN
MUT CONT
STEREO
GND
AM IN
FM IN
PILOT OUT
SEPA ADJ
L
R
R OUT
MUT CONT
AM/FM
MUT OUT
C173 0.047
C171
C172 10μ/25V
C185 0.001
R171
R173
R172
R180
R181 4.7K
C175
C176
R175 3.3K
R177
R176
R174 3.3K
C179 2.2μ/50V
C178 2.2μ/50V
C177 2.2μ/50V
C174 10μ/25V
L.P.F
R178
R179
LP171
J102
GND
12V
5V
R
GND
L
*U,PG ONLY
S101
9K
A2 A4 A3 A1
A5
J103
J101
J143
C243 0.47μ/50V
R248 2.2K
C244 0.001
R247 3.3K
R249 4.7K
Q244 2SK301 (Q1)
Q245 2SC458 (D)
R245 10K
R246 270
C247 0.047
IC241 LM7000N
XOUT
VSS
PD2
PD1
VDD2
VDD1
FM IN
AM IN
FM IF
AM IF
X IN
STRQ
CE
CL
DATA
STOUT
SYC
FM
MW
LW
Q242 2SA564A (R,S)
Q241 2SA933 (R,S)
R254 47K
R253 47K
R243 10K
R242 10K
R241 47K
XT241
C242 18P
C241 18P
A1
A2
A3
A4
A5

*MARX

VERSION	R143
J,C,U,P,PG	10K
E,A,G	47K

*MARK

VERSION	C140	R139
J,C,U,P,PG	220P	18K
E,A,G	100P	33K

*MARK

VERSION	C175 C176	C171
J,C,U,P,PG	560P	0.022
E,A,G	180P	0.01

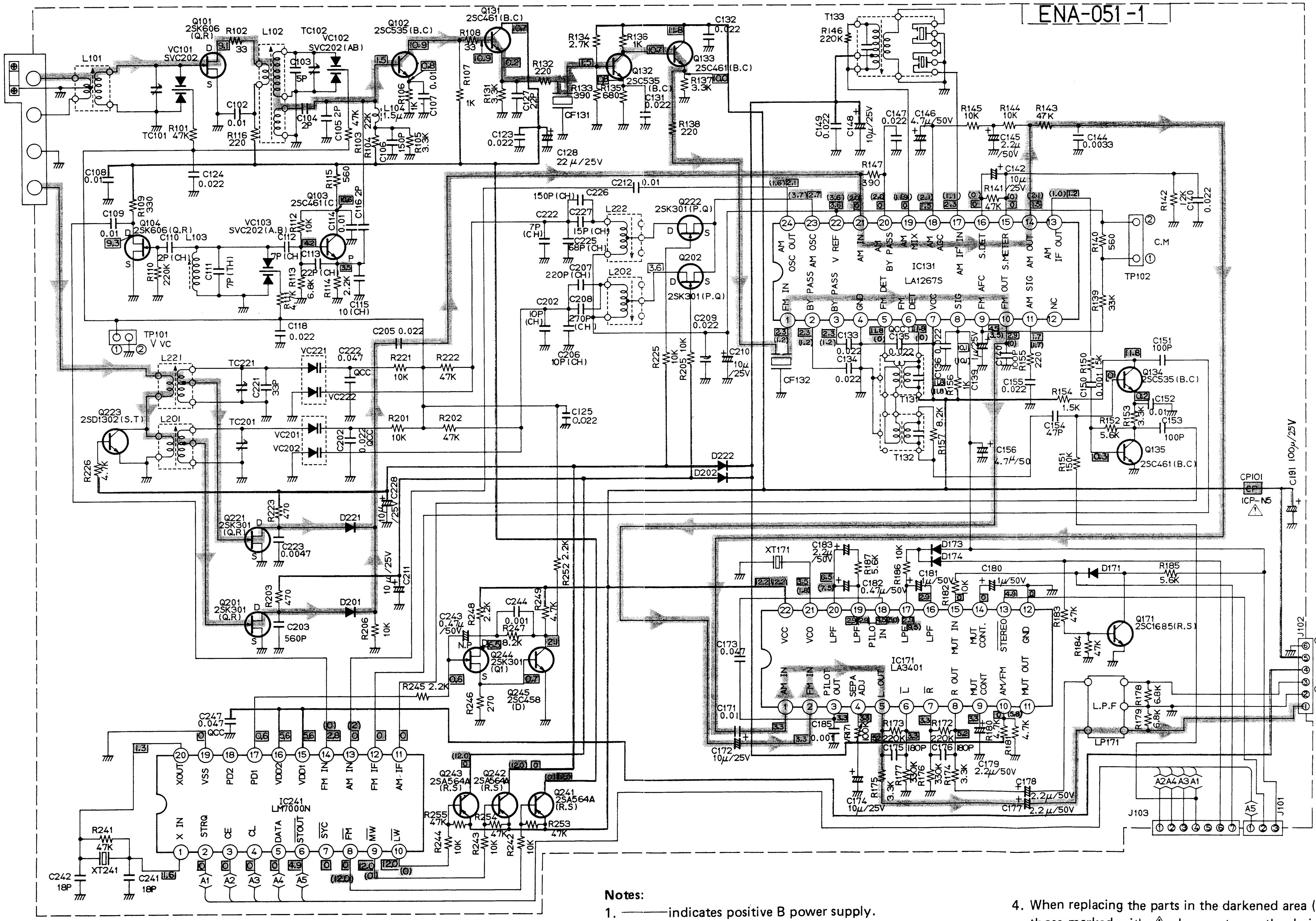
*MARK

VERSION	R178 R179	R176 R177	R172 R173
J,C,U,P,PG	6.8K	180K	120K
EA	3.3K	330K	270K
G	6.8K	330K	270K

Notes:

1. ——— indicates positive B power supply.
2. - - - - - - - indicates signal path.
3. ▨ / [▨] shows DC voltage to the chassis with no signal input.
   ▨ . . . FM [▨] AM
4. When replacing the parts in the darkened area (▨) and those marked with ⚠, be sure to use the designated parts to ensure safety.
5. This is the standard circuit diagram. The design and contents are subject to change without notice.

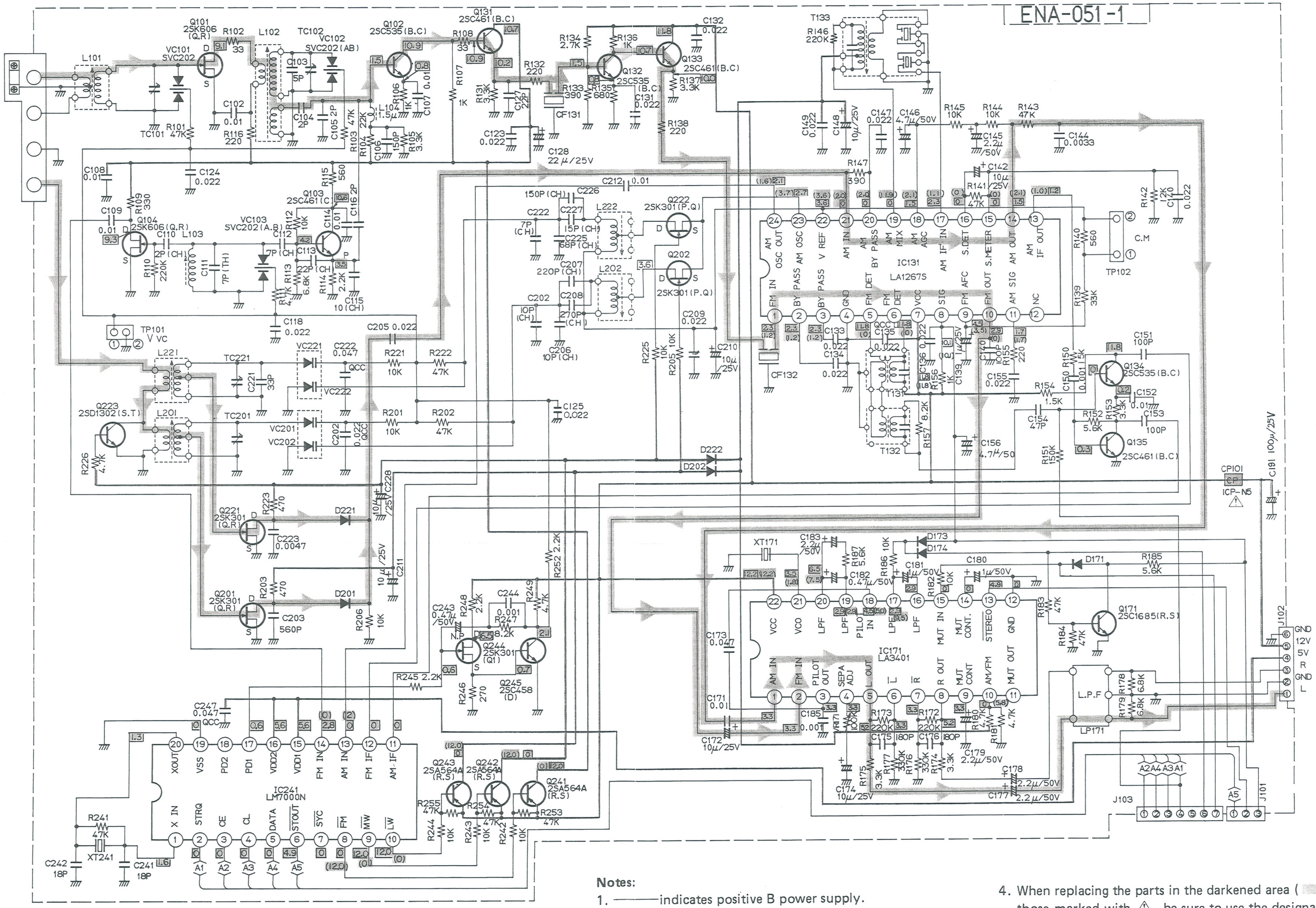
(2) FM/MW/LW Section


ENA-051-1
Q101 2SK606 (Q.R)
R102 33
L101
VC101 SVC202
TC101
R101 47K
C102 0.01
R116 220
L102
TC102
VC102 SVC202(AB)
C103 5P
C104 2P
C105 2P
Q102 2SC535(B.C)
R106 1K
C107 0.01
L104 1.5μ
R103 47K
R104 22K
C106 150P
R105 3.3K
Q131 2SC461(B.C)
R108 33
R107 1K
R131 3.3K
C127 22P
R132 220
R133 390
CF131
C123 0.022
C128 22μ/25V
R134 2.7K
R136 1K
Q132 2SC535 (B.C)
R135 680
C131 0.022
Q133 2SC461(B.C)
R137 3.3K
C132 0.022
R138 220
T133
R146 220K
C149 0.022
C148
C147 0.022
C146 4.7μ/50V
R145 10K
R144 10K
R143 47K
C145 2.2μ/50V
C144 0.0033
R147 390
C142 10μ/25V
R141 47K
R142 12K
C140 0.022
C.M
TP102
R140 560
R139 33K
IC131 LA1267S
AM OSC OUT
AM OSC BY PASS
V REF
AM IN
AM BY PASS
AM MIX
AM AGC
AM IF IN
S.DET
S.METER
AM OUT
AM IF OUT
FM IN
BY PASS
GND
FM DET
FM DET
VCC
SIG
FM AFC
FM OUT
AM SIG
NC
C108 0.01
C109 0.01
R109 330
Q104 2SK606(Q.R)
C110 2P(CH)
L103
C111 7P(TH)
R110 220K
C124 0.022
Q103 2SC461(C)
R115 560
VC103 SVC202(A.B)
R112 10K
C112 7P(CH)
C113 22P
C114 0.01
C116 2P
R113 6.8K
R114 2.2K
C115 10(CH)
C118 0.022
TP101 V VC
L221
TC221
C221 33P
VC221
C222 0.047
VC222
R221 10K
R222 47K
L201
TC201
VC201
VC202
C202 0.022
R201 10K
R202 47K
C205 0.022
C125 0.022
Q223 2SD1302(S.T)
R226 4.7K
C212 0.01
C226 150P(CH)
C227 15P(CH)
C225 68P(CH)
C222 7P(CH)
L222
Q222 2SK301(P.Q)
C207 220P(CH)
L202
Q202 2SK301(P.Q)
C202 10P(CH)
C208 270P(CH)
C206 10P(CH)
C209 0.022
C210 10μ/25V
R225 10K
R205 10K
CF132
C133 0.022
C134 0.022
C135
C136 0.022
T131
T132
R157 8.2K
C156 4.7μ/50
C155 0.022
R154 1.5K
C154 47P
R150 1.5K
C150 0.001
Q134 2SC535(B.C)
C151 100P
C152 0.01
R152 5.6K
R153 3.3K
C153 100P
Q135 2SC461(B.C)
R151 150K
CP101 ICP-N5
C191 100μ/25V
D222
D202
Q221 2SK301 (Q.R)
R223 470
C223 0.0047
D221
C228 10μ/25V
Q201 2SK301 (Q.R)
R203 470
C203 560P
D201
R206 10K
C211 10μ/25V
C243 0.47μ/50V
R248 2.2K
C244 0.001
R247 8.2K
R249 4.7K
R252 2.2K
Q244 2SK301 (Q1)
Q245 2SC458 (D)
R245 2.2K
R246 270
XT171
C183 2.2μ/50V
R187 5.6K
R186 10K
C182 0.47μ/50V
C181 1μ/50V
R182 10K
C180 1μ/50V
D173
D174
D171
R185 5.6K
IC171 LA3401
VCC
VCO
LPF
LPF
PILOT IN
LPF
MUT IN
MUT CONT.
STEREO
GND
AM IN
FM IN
PILOT OUT
SEPA ADJ
L
R
R OUT
MUT CONT
AM/FM
MUT OUT
R183 47K
R184 47K
Q171 2SC1685(R.S)
C173 0.047
C171 0.01
C172 10μ/25V
C185 0.001
R171
R173 220K
R172 220K
C175 180P
C176 180P
R177 220K
R176 3.3K
R175 3.3K
R174 3.3K
R180
R181 4.7K
C179 2.2μ/50V
C178 2.2μ/50V
C177 2.2μ/50V
C174 10μ/25V
L.P.F
LP171
R178 6.8K
R179 6.8K
J102
GND
12V
5V
R
GND
L
J103
J101
A2 A4 A3 A1
A5
C247 0.047
IC241 LM7000N
XOUT
VSS
PD2
PD1
VDD2
VDD1
FM IN
AM IN
FM IF
AM IF
X IN
STRQ
CE
CL
DATA
STOUT
SYC
FM
MW
LW
A1 A2 A3 A4 A5
R241 47K
XT241
C242 18P
C241 18P
Q243 2SA564A (R.S)
Q242 2SA564A (R.S)
Q241 2SA564A (R.S)
R255 47K
R254 47K
R253 47K
R244 10K
R243 10K
R242 10K

Notes:

1. ——— indicates positive B power supply.
2. - - - - - indicates signal path.
3. [▭] / [▨] shows DC voltage to the chassis with no signal input.
   ▭ . . . FM [▨] AM
4. When replacing the parts in the darkened area (▨) and those marked with ⚠, be sure to use the designated parts to ensure safety.
5. This is the standard circuit diagram.
   The design and contents are subject to change without notice.

(2) FM/MW/LW Section

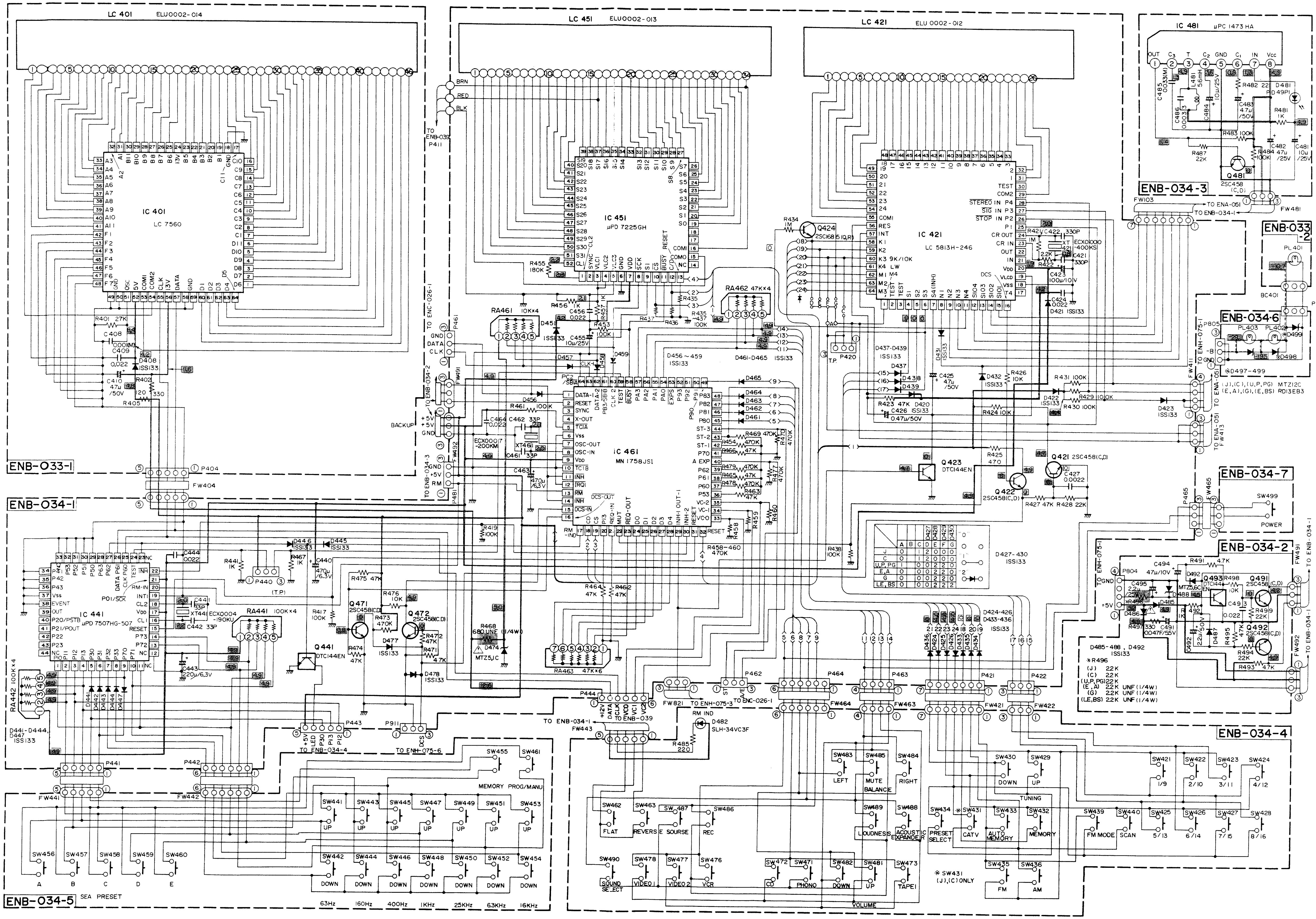

ENA-051-1
Q101 2SK606 (Q.R)
Q102 2SC535 (B.C)
Q131 2SC461 (B.C)
Q132 2SC535
Q133 2SC461 (B.C)
Q103 2SC461 (C)
Q104 2SK606 (Q.R)
Q134 2SC535 (B.C)
Q135 2SC461 (B.C)
Q171 2SC1685 (R.S)
Q201 2SK301 (Q.R)
Q202 2SK301 (P.Q)
Q221 2SK301 (Q.R)
Q222 2SK301 (P.Q)
Q223 2SD1302 (S.T)
Q241 2SA564A (R.S)
Q242 2SA564A (R.S)
Q243 2SA564A (R.S)
Q244 2SK301 (Q)
Q245 2SC458 (D)
IC131 LA1267S
IC171 LA3401
IC241 LM7000N
L101
L102
L103
L201
L202
L221
L222
T131
T132
T133
CF131
CF132
TC101
TC102
TC201
TC221
VC101 SVC202
VC102 SVC202 (AB)
VC103 SVC202 (A.B)
XT171
XT241
LP171
L.P.F
TP101 V VC
TP102
C.M
CP101 ICP-N5
J101
J102
J103
GND
12V
5V
R
GND
L
A1
A2
A3
A4
A5
D171
D173
D174
D201
D202
D221
D222
AM OSC OUT
BY PASS AM OSC
BY PASS V REF
AM IN
AM BY PASS
AM MIX
AM AGC
AM IF IN
S.DET
S.METER
AM OUT
AM IF OUT
FM IN
FM DET
GND
VCC
FM SIG
FM AFC
FM OUT
AM SIG
NC
VCC
VCO
LPF
PILOT IN
MUT IN
MUT CONT.
STEREO
GND
AM IN
FM IN
PILOT OUT
SEPA ADJ
L OUT
L
R
R OUT
MUT CONT
AM/FM
MUT OUT
XOUT
VSS
PD2
PD1
VDD2
VDD1
FM IN
AM IN
FM IF
AM IF
X IN
STRQ
CE
CL
DATA
STOUT
SYC
FM
MW
LW

Notes:

1. ——indicates positive B power supply.
2. - - - - -indicates signal path.
3. ▭ / [▨] shows DC voltage to the chassis with no signal input.
   ▭ . . . FM [▨] AM
4. When replacing the parts in the darkened area (▨) and those marked with ⚠, be sure to use the designated parts to ensure safety.
5. This is the standard circuit diagram.
   The design and contents are subject to change without notice.

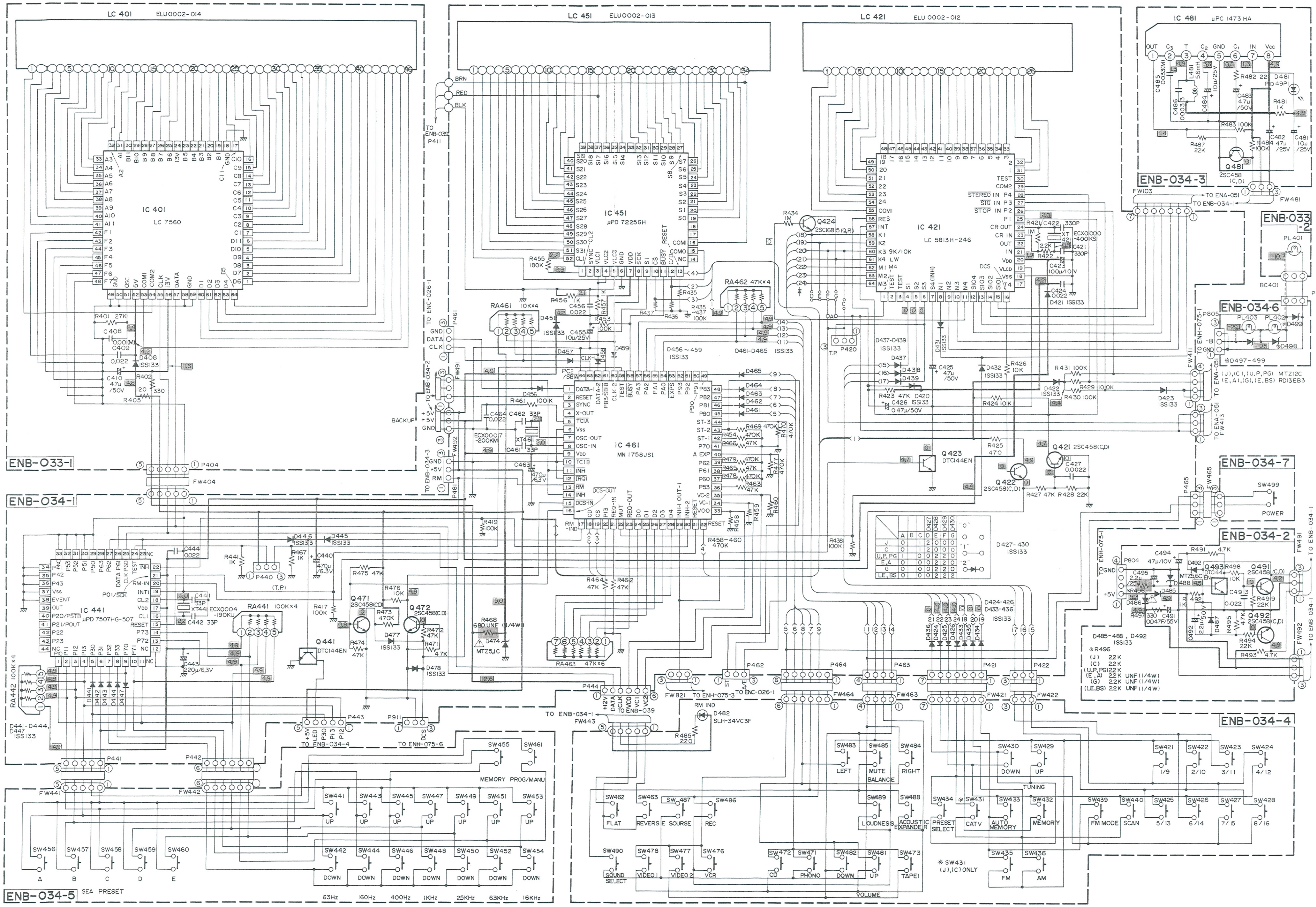
RX-5VBK
RX-5VLBK

(3) Logic Section

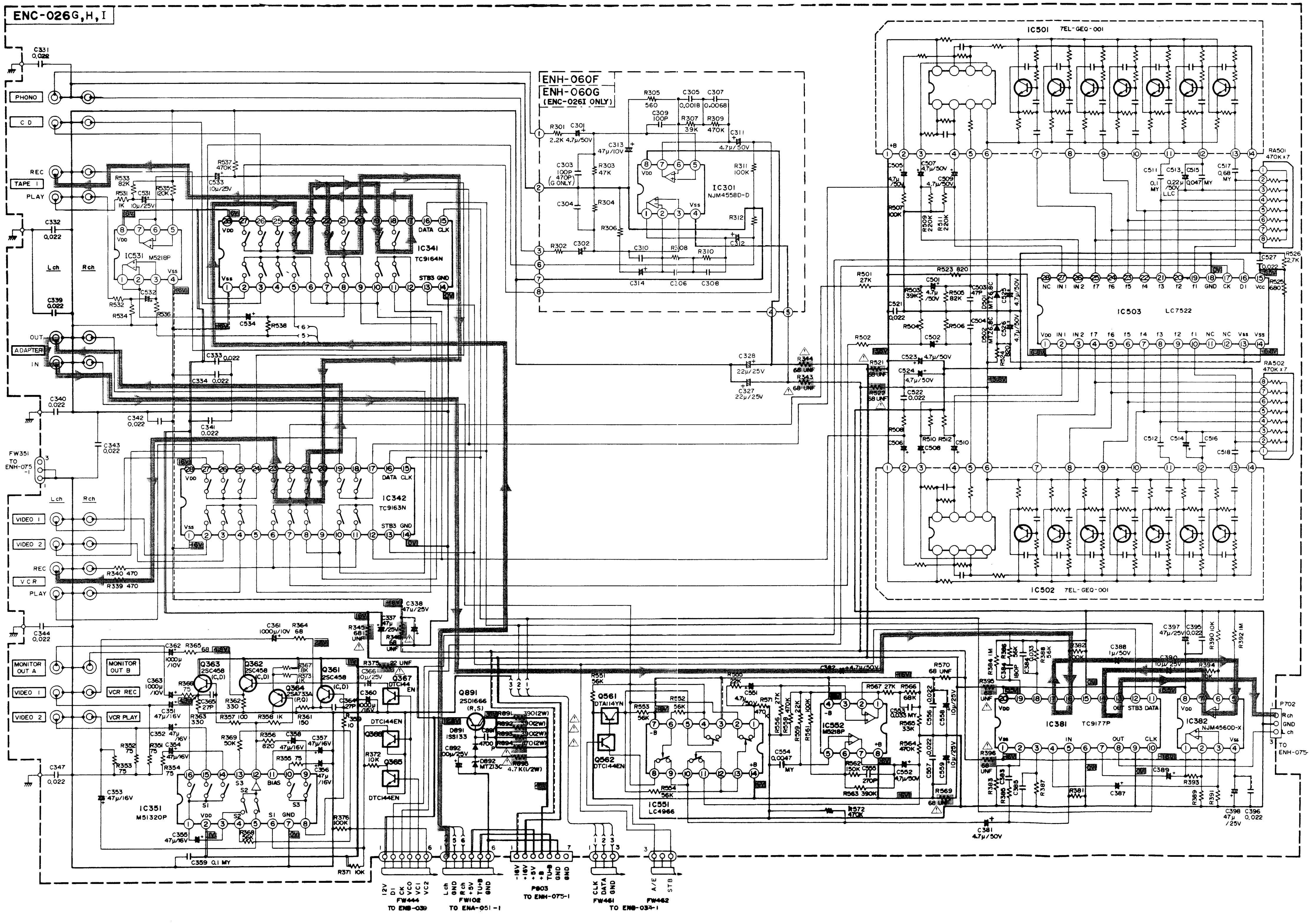

LC 401 ELU0002-014
LC 451 ELU0002-013
LC 421 ELU 0002-012
IC 481 μPC 1473 HA
IC 401 LC 7560
IC 451 μPD 7225GH
IC 421 LC 5813H-246
IC 461 MN 1758JS1
IC 441 μPD 7507HG-507
ENB-033-1
ENB-034-1
ENB-034-2
ENB-034-3
ENB-034-4
ENB-034-5
ENB-034-6
ENB-034-7
ENB-033-2
BRN
RED
BLK
TO ENB-039 P411
TO ENC-026-1
BACKUP
TO ENA-051
TO ENB-034-1
TO ENH-075-3
TO ENC-026-1
TO ENB-034-4
TO ENH-075-6
TO ENB-039
Q424 2SC1685(Q,R)
Q423 DTC144EN
Q422 2SC458(C,D)
Q421 2SC458(C,D)
Q441 DTC144EN
Q471 2SC458(C,D)
Q472 2SC458(C,D)
Q481 2SC458(C,D)
Q491 2SC458(C,D)
Q492 2SC458(C,D)
Q493 DTC144EN
RA461 10K×4
RA462 47K×4
RA441 100K×4
RA442 100K×4
RA463 47K×6
D427-430 1SS133
D424-426 D433-436 1SS133
D437-D439 1SS133
D456~459 1SS133
D461-D465 1SS133
D441-D444, D447 1SS133
D485-488, D492 1SS133
D474 MTZ5.1C
D482 SLH-34VC3F
D481 RD49PI
*R496
(J) 22K
(C) 22K
(U,P,PG) 22K
(E,A) 22K UNF(1/4W)
(G) 22K UNF(1/4W)
(LE,BS) 22K UNF(1/4W)
(J),(C),(U,P,PG) MTZ12C
(E,A),(G),(E,BS) RD13EB3
*D497-499
PL401
PL402
PL403
SW499 POWER
SW455
SW461
MEMORY PROG/MANU
SW441 UP
SW443 UP
SW445 UP
SW447 UP
SW449 UP
SW451 UP
SW453 UP
SW442 DOWN
SW444 DOWN
SW446 DOWN
SW448 DOWN
SW450 DOWN
SW452 DOWN
SW454 DOWN
63Hz
160Hz
400Hz
1KHz
2.5KHz
6.3KHz
16KHz
SW456 A
SW457 B
SW458 C
SW459 D
SW460 E
SEA PRESET
SW483 LEFT
SW485 MUTE BALANCE
SW484 RIGHT
SW462 FLAT
SW463 REVERSE
SW487 SOURSE
SW486 REC
SW489 LOUDNESS
SW488 ACOUSTIC EXPANDER
SW490 SOUND SELECT
SW478 VIDEO1
SW477 VIDEO2
SW476 VCR
SW472 CD
SW471 PHONO
SW482 DOWN
SW481 UP
VOLUME
SW473 TAPE1
SW430 DOWN
SW429 UP
TUNING
SW434 PRESET SELECT
*SW431 CATV
SW433 AUTO MEMORY
SW432 MEMORY
SW435 FM
SW436 AM
*SW431 (J),(C) ONLY
SW421 1/9
SW422 2/10
SW423 3/11
SW424 4/12
SW439 FM MODE
SW440 SCAN
SW425 5/13
SW426 6/14
SW427 7/15
SW428 8/16

(No. 2904)

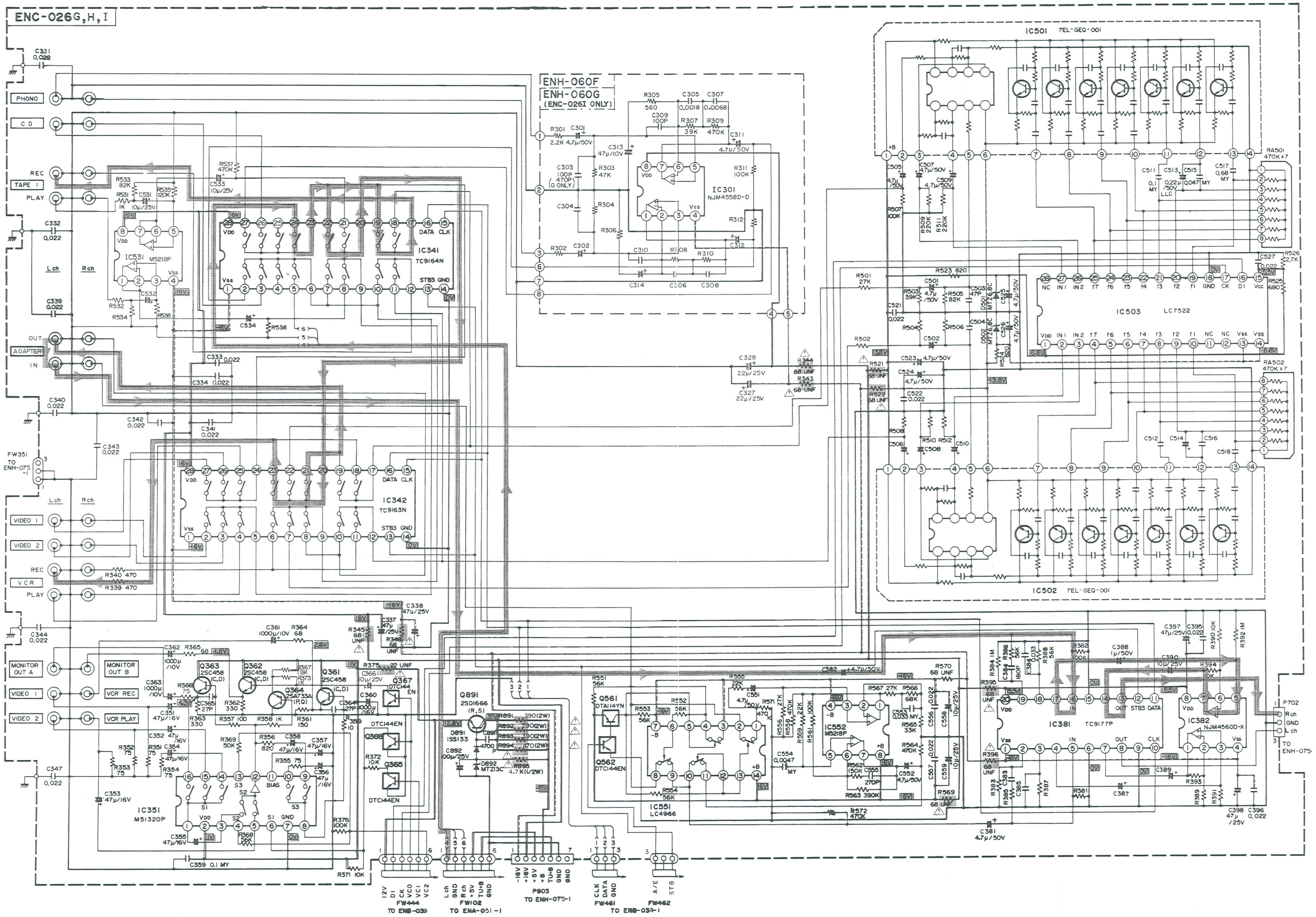
(3) Logic Section


LC 401 ELU0002-014
LC 451 ELU0002-013
LC 421 ELU 0002-012
IC 481 μPC 1473 HA
IC 401 LC 7560
IC 451 μPD 7225GH
IC 421 LC 5813H-246
IC 461 MN 1758JS1
IC 441 μPD 7507HG-507
ENB-033-1
ENB-034-1
ENB-034-2
ENB-034-3
ENB-034-4
ENB-034-5
ENB-034-6
ENB-034-7
ENB-033-2
BACKUP
BRN
RED
BLK
TO ENB-039 P411
TO ENC-026-1
TO ENB-034-2
TO ENB-034-3
TO ENA-051
TO ENA-051 FW413
TO ENB-034-1 FW443
TO ENH-075-3
TO ENC-026-1
TO ENB-034-4
TO ENH-075-6
Q424 2SC1685(Q,R)
Q423 DTC144EN
Q421 2SC458(C,D)
Q422 2SC458(C,D)
Q441 DTC144EN
Q471 2SC458(CD)
Q472 2SC458(CD)
Q481 2SC458 (C,D)
Q491 2SC458(C,D)
Q492 2SC458(C,D)
Q493 DTC144EN
D482 SLH-34VC3F
RM IND
POWER
SEA PRESET
SW456 A
SW457 B
SW458 C
SW459 D
SW460 E
SW441 UP
SW442 DOWN
63Hz
160Hz
400Hz
1KHz
2.5KHz
6.3KHz
16KHz
SW455 MEMORY
SW461 PROG/MANU
SW483 LEFT
SW485 MUTE BALANCE
SW484 RIGHT
SW462 FLAT
SW463 REVERSE
SW487 SOURSE
SW486 REC
SW489 LOUDNESS
SW488 ACOUSTIC EXPANDER
SW490 SOUND SELECT
SW478 VIDEO1
SW477 VIDEO2
SW476 VCR
SW472 CD
SW471 PHONO
SW482 DOWN
SW481 UP
SW473 TAPE1
VOLUME
SW434 PRESET SELECT
SW431 CATV
SW433 AUTO MEMORY
SW432 MEMORY
SW430 DOWN
SW429 UP
TUNING
SW435 FM
SW436 AM
※SW431 (J),(C) ONLY
SW439 FM MODE
SW440 SCAN
SW421 1/9
SW422 2/10
SW423 3/11
SW424 4/12
SW425 5/13
SW426 6/14
SW427 7/15
SW428 8/16
D427-430 1SS133
D485-488, D492 1SS133
※R496
(J) 22K
(C) 22K
(U,P,PG) 22K
(E,A) 22K UNF(1/4W)
(G) 22K UNF(1/4W)
(LE,BS) 22K UNF(1/4W)
※D497-499 (J),(C),(U,P,PG) MTZ12C (E,A),(G),(LE,BS) RD13EB3

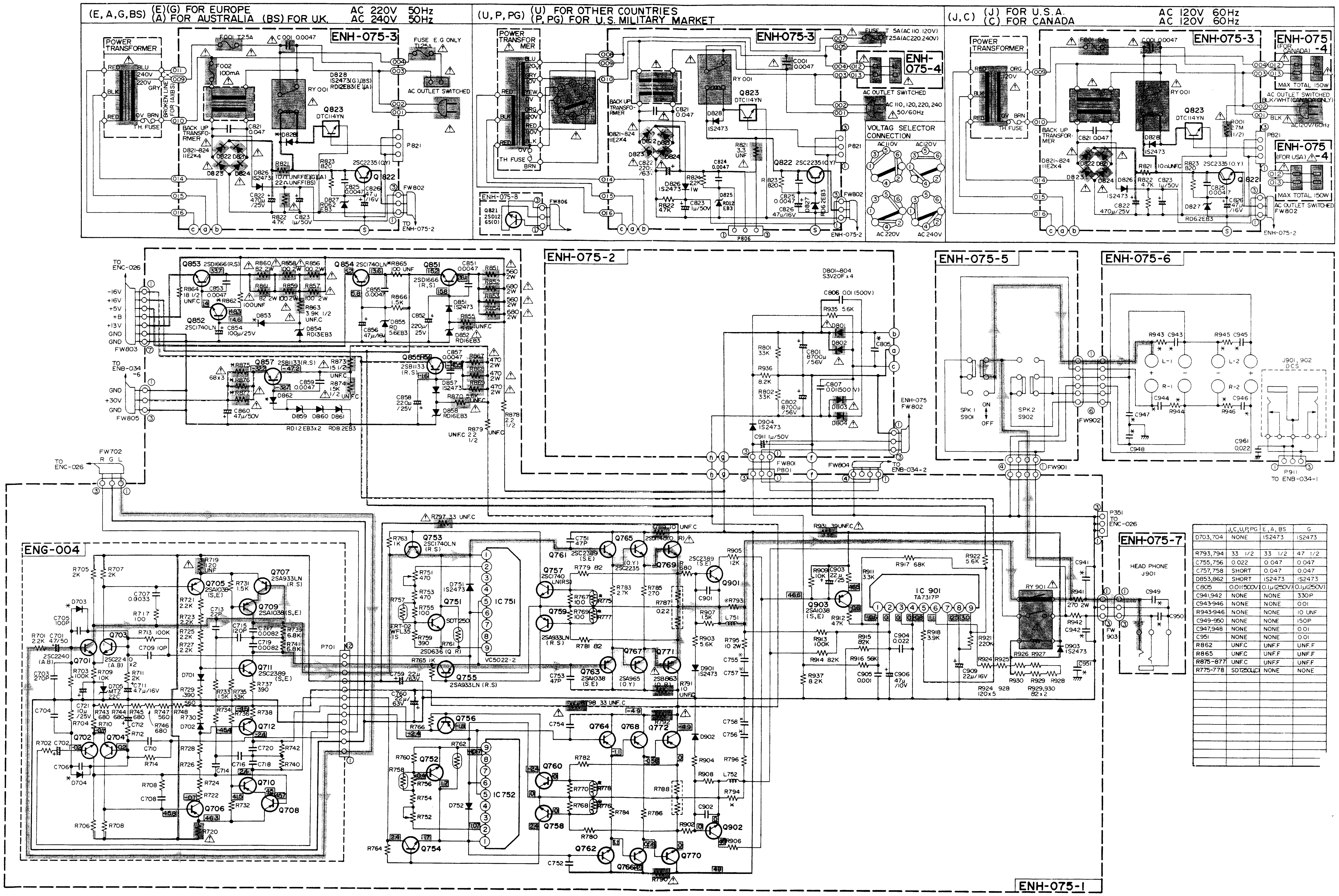
(4) Pre-Amplifier Section


ENC-026G,H,I
PHONO
CD
REC
TAPE 1
PLAY
OUT
ADAPTER
IN
VIDEO 1
VIDEO 2
REC
VCR
PLAY
MONITOR OUT A
MONITOR OUT B
VCR REC
VCR PLAY
Lch
Rch
ENH-060F
ENH-060G
(ENC-026I ONLY)
IC301 NJM4558D-D
IC341 TC9164N
IC342 TC9163N
IC531 M5218P
IC351 M51320P
IC501 7EL-GEQ-001
IC502 7EL-GEQ-001
IC503 LC7522
IC551 LC4966
IC552 M5218P
IC381 TC9177P
IC382 NJM4560D-X
Q361 2SC458
Q362 2SC458
Q363 2SC458
Q364 2SA733A
Q367 DTC144EN
Q368 DTC144EN
Q369 DTC144EN
Q561 DTA114YN
Q562 DTC144EN
Q891 2SD1666
D891 1SS133
D892 MTZ13C
FW351 TO ENH-075-1
FW444 TO ENB-039
FW102 TO ENA-051-1
P803 TO ENH-075-1
FW461
FW462
TO ENB-034-1
P702 TO ENH-075-
Rch
GND
Lch
RA501 470K×7
RA502 470K×7

(4) Pre-Amplifier Section

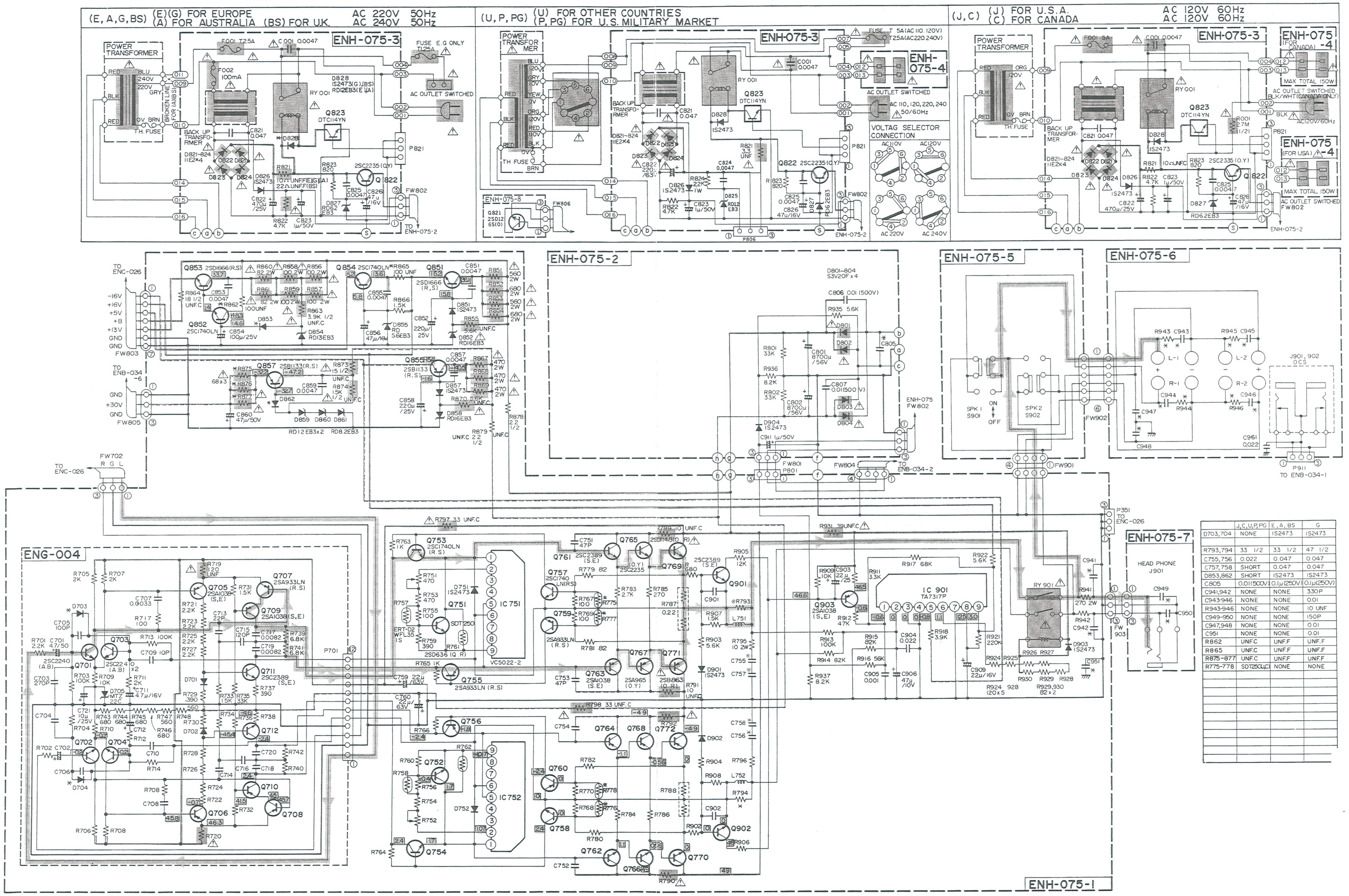

ENC-026G,H,I
ENH-060F
ENH-060G
(ENC-026I ONLY)
PHONO
CD
REC
TAPE I
PLAY
Lch
Rch
OUT
ADAPTER
IN
FW351
TO ENH-075-I
VIDEO 1
VIDEO 2
VCR
MONITOR OUT A
MONITOR OUT B
VCR REC
VCR PLAY
IC531 M5218P
IC341 TC9164N
IC342 TC9163N
IC301 NJM4558D-D
IC501 7EL-GEQ-001
IC502 7EL-GEQ-001
IC503 LC7522
IC351 M51320P
Q363 2SC458
Q362 2SC458
Q364 2SA733A
Q361 2SC458
Q367 DTC144EN
Q368 DTC144EN
Q365 DTC144EN
Q891 2SD1666
D891 1SS133
D892 MTZ13C
Q561 DTA114YN
Q562 DTC144EN
IC551 LC4966
IC552 M5218P
IC381 TC9177P
IC382 NJM4560D-X
P702
TO ENH-075-
FW444 TO ENB-039
FW102 TO ENA-051-I
P803 TO ENH-075-I
FW461
FW462 TO ENB-034-I

(5) Power Amplifier Section


(E, A, G, BS) (E)(G) FOR EUROPE (A) FOR AUSTRALIA (BS) FOR U.K. AC 220V 50Hz AC 240V 50Hz
(U, P, PG) (U) FOR OTHER COUNTRIES (P, PG) FOR U.S. MILITARY MARKET
(J, C) (J) FOR U.S.A. (C) FOR CANADA AC 120V 60Hz AC 120V 60Hz
POWER TRANSFORMER
ENH-075-3
ENH-075-4
AC OUTLET SWITCHED
VOLTAG SELECTOR CONNECTION
ENH-075-2
ENH-075-5
ENH-075-6
ENH-075-7
ENG-004
ENH-075-1
IC 751 VC5022-2
IC 752
IC 901 TA7317P
HEAD PHONE J901
SPK 1 S901
SPK 2 S902
TO ENC-026
TO ENB-034
TO ENB-034-2
P911 TO ENB-034-1
FW702
FW803
FW805
P701
P351
MAX TOTAL 150W

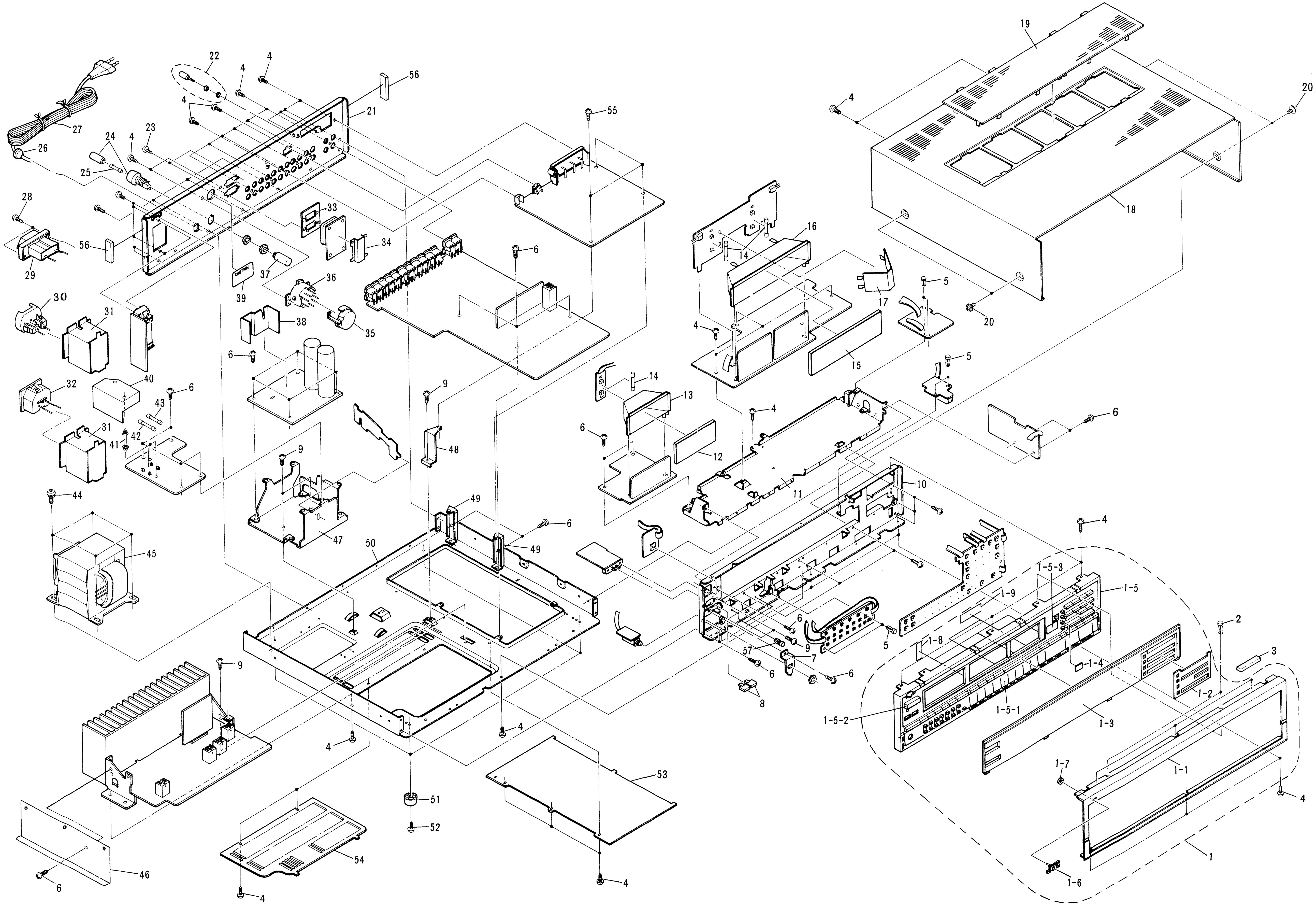
	J,C,U,P,PG	E, A, BS	G
D703,704	NONE	1S2473	1S2473
R793,794	33 1/2	33 1/2	47 1/2
C755,756	0.022	0.047	0.047
C757,758	SHORT	0.047	0.047
D853,862	SHORT	1S2473	1S2473
C805	0.01(500V)	0.1μ(250V)	0.1μ(250V)
C941,942	NONE	NONE	330P
C943-946	NONE	NONE	0.01
R943-946	NONE	NONE	10 UNF
C949-950	NONE	NONE	150P
C947,948	NONE	NONE	0.01
C951	NONE	NONE	0.01
R862	UNF.C	UNF.F	UNF.F
R865	UNF.C	UNF.F	UNF.F
R875-877	UNF.C	UNF.F	UNF.F
R775-778	SDT250U(C)	NONE	NONE

(5) Power Amplifier Section


(E, A, G, BS) (E)(G) FOR EUROPE
(A) FOR AUSTRALIA (BS) FOR U.K.
AC 220V 50Hz
AC 240V 50Hz
(U, P, PG) (U) FOR OTHER COUNTRIES
(P, PG) FOR U.S. MILITARY MARKET
(J, C) (J) FOR U.S.A.
(C) FOR CANADA
AC 120V 60Hz
AC 120V 60Hz
POWER TRANSFORMER
ENH-075-3
ENH-075-4
ENH-075-8
VOLTAG SELECTOR CONNECTION
AC110V
AC120V
AC220V
AC240V
AC OUTLET SWITCHED
MAX TOTAL 150W
Q823 DTC114YN
Q822 2SC2235(O,Y)
RY 001
ENH-075-2
ENH-075-5
ENH-075-6
ENH-075-7
ENH-075-1
ENG-004
IC 751 VC5022-2
IC 752
IC 901 TA7317P
RY 901
HEAD PHONE J901
J901, 902 OCS
SPK 1 S901
SPK 2 S902
TO ENC-026
TO ENB-034
TO ENB-034-1
TO ENB-034-2
FW702
FW801
FW802
FW803
FW804
FW805
FW901
FW902
FW903
P351
P701
P801
P806
P821
P911

	J,C,U,P,PG	E, A, BS	G
D703,704	NONE	1S2473	1S2473
R793,794	33 1/2	33 1/2	47 1/2
C755,756	0.022	0.047	0.047
C757,758	SHORT	0.047	0.047
D853,862	SHORT	1S2473	1S2473
C805	0.01(500V)	0.1μ(250V)	0.1μ(250V)
C941,942	NONE	NONE	330P
C943-946	NONE	NONE	0.01
R943-946	NONE	NONE	10 UNF
C949-950	NONE	NONE	150P
C947,948	NONE	NONE	0.01
C951	NONE	NONE	0.01
R862	UNF.C	UNF.F	UNF.F
R865	UNF.C	UNF.F	UNF.F
R875-877	UNF.C	UNF.F	UNF.F
R775-778	SDT250(J,C)	NONE	NONE

Exploded Views and Parts List


19
22
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1-5
1-9
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57
7
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1-8
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1-5-2
1-3
4
4
53
1-7
1-1
51
4
52
1
46
54
6
4
4
1-6

⚠	Item	Part Number	Part Name	Q'ty	Description	Areas
	1	EFP-RX5VBKJ	Front Panel Ass'y	1		J, C
		EFP-RX5VBKE	Front Panel Ass'y	1		P, PG, E, A, G, U
		EFP-RX5VLBKE	Front Panel Ass'y	1		LE, LBS
	1-1	E25257-007	Front Panel	1		J, C, P, PG, E, A, G, U
		E25257-008	Front Panel	1		LE, LBS
	1-2	E72805-007	Plate	1		J, C
		E72805-008	Plate	1		P, PG, E, A, G, LE, LBS, U
	1-3	E25259-004	Window Screen	1		
	1-4	E72437-002	Sheet	1		
	1-5	E25327-012	Front Base Ass'y	1		J, C
		E25327-013	Front Base Ass'y	1		P, PG, E, A, G, U
		E25327-014	Front Base Ass'y	1		LE, LBS
	1-5-1	E25271-001	Front Plate	1		J,C,P,PG,E,A, G, U
		E25271-002	Front Plate	1		LE,LBS
	1-5-2	E72808-001	Push Button	1	POWER	
	1-5-3	E72436-002	Screen	1		
	1-6	E72968-001	JVC Mark	1		
	1-7	E60912-003	Speed Nut	1		
	1-8	EX0040004N20S02	Spacer	3		
	1-9	EX0074003N20S02	Spacer	2		
	2	E48729-009	Plastic Rivet			
	3	EX004007N40S	Spacer			
	4	SBSE3008M	Screw			
	5	E48729-008	Plastic Rivet			
	6	SBSE3008CC	Screw			
	7	E72858-002	Headphone Bracket	1		
	8	E72790-001	Push Knob	2		
	9	SBST3006CC	Screw			
	10	E11242-001	Front Bracket	1		
	11	E25263-001	LCD Bracket	1		
	12	E73005-002	Sheet	1		
	13	E303283-001	Lamp Holder	1		
⚠	14	ELP4101-003	Fuse Lamp	3		
	15	E304195-001	Sheet	1		
	16	E304103-001	Lamp Holder	1		
	17	E72813-001	Reflector	1		
	18	E25266-001	Metal Cover	1		J, C, P, PG, A, G, U
		E25267-001	Metal Cover	1		E, LE, LBS
	19	E23862-004	Grille	1		E, LE, LBS
	20	E61660-004	Screw	4		
	21	E11256-034	Rear Panel	1		J, C
		E11256-035	Rear Panel	1		P, PG, U
		E11256-036	Rear Panel	1		E, LE
		E11256-037	Rear Panel	1		G
		E11256-038	Rear Panel	1		A
		E11256-039	Rear Panel	1		LBS
	22	E70078-001	GND Terminal	1		
	23	SDSB3008M	Screw	2		J, C, P, PG, U
⚠	24	QMG0301-003	Fuse Holder	1		P, PG, E, LE, G, U
⚠	25	QMF51A2-2R5S	Fuse	1		PG, U
⚠		QMF51A2-5R0S	Fuse	1		P
⚠		QMF51A2-1R25S	Fuse	1		E, LE
⚠	26	QHS3876-162	Cord Stopper	1		J, C, P, PG, E, LE, A, G, U
⚠		QHS3876-162BS	Cord Stopper	1		LBS

⚠ : Safety Parts

⚠	Item	Part Number	Part Name	Q'ty	Description	Areas
⚠	27	QMP1900-200	Power Cord	1		J
⚠		QMP1480-200H	Power Cord	1		C
⚠		QMP7600-200	Power Cord	1		P, PG, U
⚠		QMP3900-200	Power Cord	1		E, LE, G
⚠	27	QMP2560-244	Power Cord	1		A
⚠		QMP9017-008BS	Power Cord	1		BS
	28	SBSB3016M	Screw	2		E, LE, G
⚠	29	QMC0240-002	AC Outlet	1		E. LE, G
⚠	30	EMC0233-001	AC Outlet	1		A
	31	E73209-001	Outlet Cover	1		A, LBS
⚠	32	QMC0232-001BS	AC Outlet	1		LBS
	33	E69589-008	Spacer	1		J
	34	E72942-001	Outlet Cover	1		J, C, P, PG, U
	35	E302764-001	Voltage Selector Cover	1		P, PG, U
⚠	36	QSR0085-008U	Voltage Selector	1		P, PG, U
	37	E69291-001	Fuse Cover	1		P, PG, U
	38	E73210-001	Sheet	1		
	39	E65507-001	Caution Label	1		
	40	E304174-001	Primary Cover	1		E, A, G
	41	E302321-001	Fastener	2		E, A, G
⚠	42	QMF51A2-R10S	Fuse	1		E, LE, A, G
⚠		QMF51E2-R10SBS	Fuse	1		LBS
⚠	43	QMF51U1-5R0S	Fuse	1		J, C
⚠		QMF51A2-2R5S	Fuse	1		E, LE, A, G
⚠		QMF51E2-2R5SBS	Fuse	1		LBS
	44	E65389-004	Ass'y Screw	4		
⚠	45	ETP1150-19JA	Power Transformer	1		J, C
⚠		ETP1150-19FA	Power Transformer	1		P, PG, U
⚠		ETP1150-19EA	Power Transformer	1		E, LE, A, G
⚠		ETP1150-19EABS	Power Transformer	1		LBS
	46	E304280-001	Sheet	1		
	47	E304102-001	Circuit Board Holder	1		
	48	E72810-001	Circuit Board Holder	1		
	49	E71278-002	Circuit Board Holder	2		
	50	E11241-001	Chassis Base	1		
	51	E47227-012	Foot	4		
	52	SBSB3010M	Screw	4		
	53	E302294-001	Bottom Cover	1		
	54	E302295-004	Bottom Cover	1		
	55	GBSE3008CC	Screw	3		
	56	EX0085010R10S	Spacer	2		
	57	E48729-009	Plastic Rivet	2		LBS

⚠ : Safety Parts

The Marks for Designated Areas

J . . . . U.S.A.
C . . . . Canada
A . . . . Australia
L, LE . . . . Europe
G . . . . West Germany
LBS . . . . U.K.
P, PG . . . . U.S. Military Market
U . . . . Other Countries

No mark indicates all areas.

PARTS LIST

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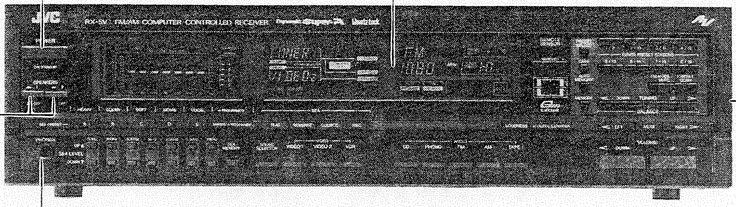
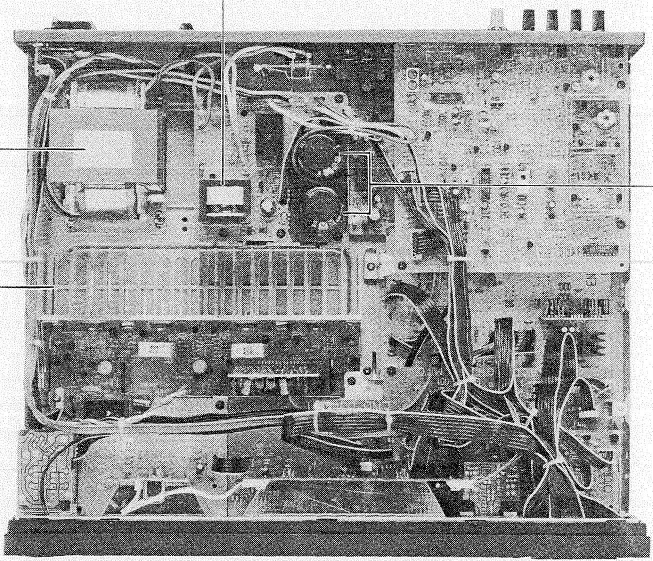
Main Parts Locations

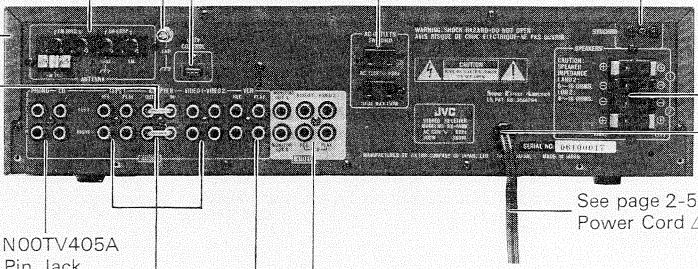
■Front View


E72808-001
Push Button
E25259-004
Window Screen
E72790-001
Push Knob
See page 2-4
Front Panel Ass'y
QMS6A30-021
Head phone Jack

■Top View


See page 2-5
Power Transformer ⚠
See page 2-5
Power Transformer ⚠
QEZ0075-878E
Electrolytic Capacitor
E302267-005
Heat Sink

■Rear View


E70078-001
GND Terminal
See page 2-9
Antenna Terminal
EMZ 1004-001
Socket
See page 2-5
AC Outlet ⚠
QMS3533-001
Mini Jack
See page 2-4
Rear Panel
EMZ 3001-001
Short Pin
EMB90TV-801A
Speaker Terminal
See page 2-4
Cord Stopper ⚠
See page 2-5
Power Cord ⚠
EMN00TV405A
4P Pin Jack
EMN00TV402A
4P Pin Jack
EMN00TV405A
4P Pin Jack
EMN00TV-602A
6P Pin Jack

⚠ :Safety Parts

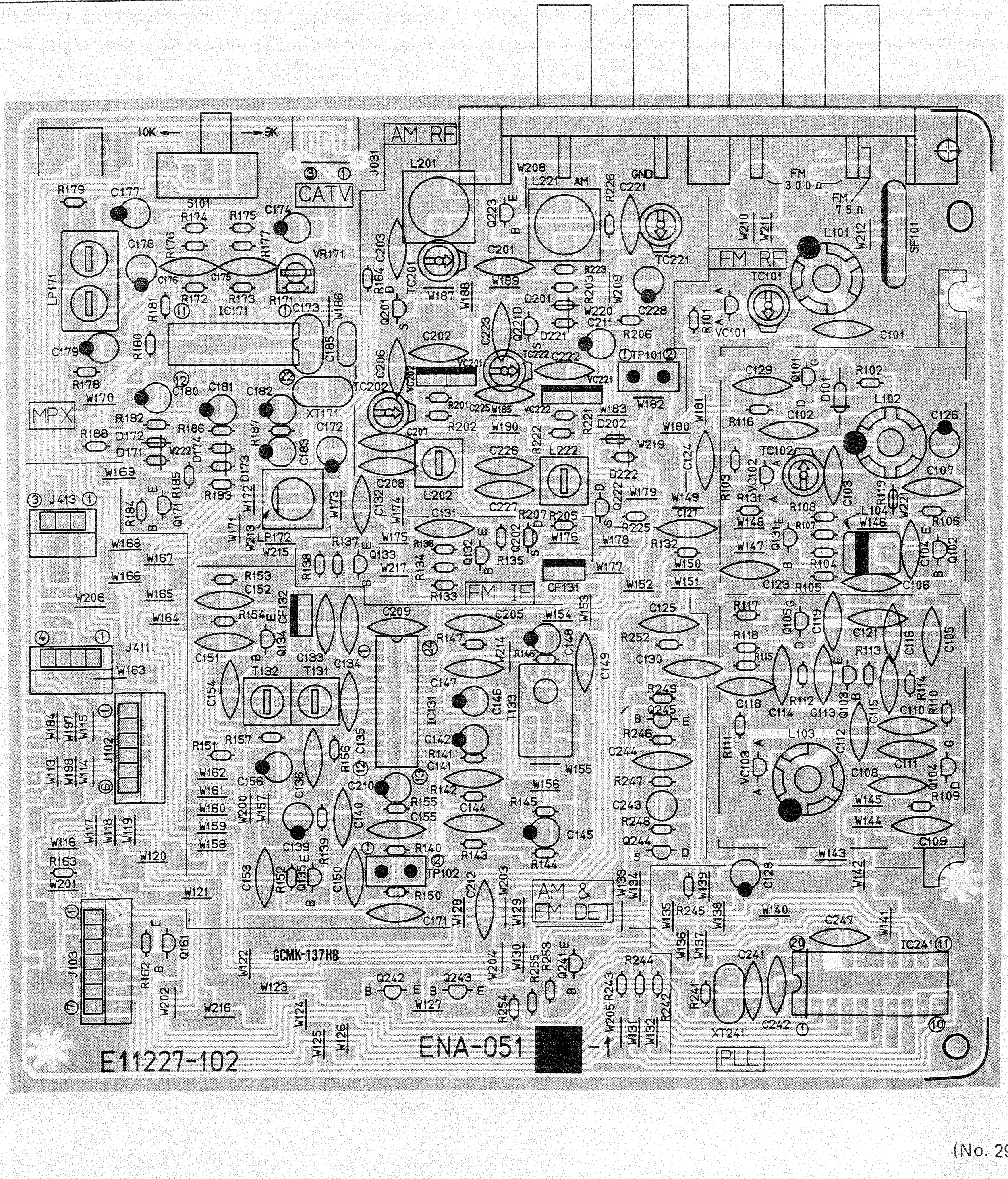
Printed Circuit Board Ass'y and Parts List

■ENA-051☐ Tuner P.C. Board Ass'y

Note:ENA-051☐ varies according to the areas employed. Seenote (1) when placing an order.

Note (1)

P.C. Board Ass'y	Designated Areas
ENA-051 A	U.S.A., Canada
ENA-051 C	U.S.Military Market & Other Countries
ENA-051 D	Europe, Australia
ENA-051 E	Europe & U.K. with LW
ENA-051 F	West Germany


10K
5K
S101
AM RF
CATV
J031
L201
W208
L221
AM
GND
C221
FM
300Ω
FM
75Ω
SF101
L101
FM RF
TC101
TC221
VR171
LP171
IC171
MPX
XT171
LP172
J413
J411
J102
J103
TC201
TC202
VC201
VC202
VC221
VC222
L202
L222
TP101
L102
TC102
VC102
L104
FM IF
CF131
T132
T131
T133
IC131
L103
VC103
C101
C126
C129
TP102
AM & FM DET
GCMK-137HB
IC241
XT241
PLL
ENA-051
-1
E11227-102

Transistors

⚠	ITEM	PART NUMBER	DESCRIPTION		AREA
				MAKER	
	Q101	2SK606(Q,R)	F.E.T	MATSUSHITA	F
	Q102	2SC535(B,C)	SILICON	HITACHI	
	Q103	2SC461(C)	SILICON	HITACHI	
	Q104	2SK606(Q,R)	F.E.T	MATSUSHITA	F
	Q104	2SK606(Q,R,S)	F.E.T		A
	Q104	2SK606(Q,R,S)	F.E.T		C
	Q104	2SK606(Q,R,S)	F.E.T		D
	Q104	2SK606(Q,R,S)	F.E.T		E
	Q105	2SK606(Q,R)	F.E.T	MATSUSHITA	F
	Q131	2SC461(B,C)	SILICON	HITACHI	
	Q132	2SC535(B,C)	SILICON	HITACHI	
	Q133	2SC461(B,C)	SILICON	HITACHI	
	Q134	2SC535(B,C)	SILICON	HITACHI	
	Q135	2SC461(B,C)	SILICON	HITACHI	
	Q161	2SC1685(R,S)	SILICON	MATSUSHITA	A
	Q171	2SC1685(R,S)	SILICON	MATSUSHITA	
	Q201	2SK301(Q,R)	F.E.T	MATSUSHITA	
	Q202	2SK301(P,Q)	F.E.T	MATSUSHITA	E
	Q221	2SK301(Q,R)	F.E.T	MATSUSHITA	E
	Q222	2SK301(P,Q)	F.E.T	MATSUSHITA	E
	Q223	2SD1302(S,T)	SILICON	MATSUSHITA	E
	Q241	2SA564A(R,S)	SILICON	MATSUSHITA	
	Q242	2SA564A(R,S)	SILICON	MATSUSHITA	
	Q243	2SA564A(R,S)	SILICON	MATSUSHITA	E
	Q244	2SK301(Q1)	F.E.T	MATSUSHITA	
	Q245	2SC458(D)	SILICON	HITACHI	

I.C.S.

⚠	ITEM	PART NUMBER	DESCRIPTION		AREA
				MAKER	
	IC131	LA1267S	I.C.	SANYO	
	IC171	LA3401	I.C.	SANYO	
	IC241	LM7000N	I.C.	SANYO	

Diodes

⚠	ITEM	PART NUMBER	DESCRIPTION		AREA
				MAKER	
	D171	1SS119	SILICON	HITACHI	
	D173	1SS119	SILICON	HITACHI	
	D174	1SS119	SILICON	HITACHI	
	D201	1SS119	SILICON	HITACHI	E
	D202	1SS119	SILICON	HITACHI	E
	D221	1SS119	SILICON	HITACHI	E
	D222	1SS119	SILICON	HITACHI	E
	VC101	SVC202(AB)	VALICAP	SANYO	
	VC102	SVC202(AB)	VALICAP	SANYO	
	VC103	SVC202(AB)	VALICAP	SANYO	
	VC201	KV1236Z	VALICAP	TOKO	
	VC202	KV1236Z	VALICAP	TOKO	
	VC221	KV1236Z	VALICAP	TOKO	E
	VC222	KV1236Z	VALICAP	TOKO	E

Capacitors

⚠	ITEM	PART NUMBER	DESCRIPTION			AREA
	C102	QCF21HP-103	0.01MF	50V	CERAMIC	
	C103	QCS21HJ-5R0	5.0PF	50V	CERAMIC	
	C104	QCS21HJ-2R0	2.0PF	50V	CERAMIC	
	C105	QCS21HJ-2R0	2.0PF	50V	CERAMIC	A
	C105	QCS21HJ-2R0	2.0PF	50V	CERAMIC	C
	C105	QCS21HJ-2R0	2.0PF	50V	CERAMIC	D
	C105	QCS21HJ-2R0	2.0PF	50V	CERAMIC	E
	C106	QCS21HJ-151	150PF	50V	CERAMIC	
	C107	QCF21HP-103	0.01MF	50V	CERAMIC	
	C108	QCF21HP-103	0.01MF	50V	CERAMIC	
	C109	QCF21HP-103	0.01MF	50V	CERAMIC	
	C110	QCT26CH-2R0	2.0PF	50V	CERAMIC	
	C111	QCT26TH-7R0	7.0PF	50V	CERAMIC	
	C112	QCT26CH-7R0	7.0PF	50V	CERAMIC	
	C113	QCT26CH-220	22PF	50V	CERAMIC	

Capacitors

⚠	ITEM	PART NUMBER	DESCRIPTION			AREA
	C114	QCF21HP-103	0.01MF	50V	CERAMIC	
	C115	QCT26CH-100	10PF	50V	CERAMIC	
	C116	QCS21HJ-2R0	2.0PF	50V	CERAMIC	A
	C116	QCS21HJ-2R0	2.0PF	50V	CERAMIC	C
	C116	QCS21HJ-2R0	2.0PF	50V	CERAMIC	D
	C116	QCS21HJ-2R0	2.0PF	50V	CERAMIC	E
	C118	QCF21HP-223	0.022MF	50V	CERAMIC	
	C119	QCT26CH-2R0	2.0PF	50V	CERAMIC	F
	C121	QCS21HJ-3R0	3.0PF	50V	CERAMIC	F
	C123	QCF21HP-223	0.022MF	50V	CERAMIC	
	C124	QCF21HP-223	0.022MF	50V	CERAMIC	
	C125	QCF21HP-223	0.022MF	50V	CERAMIC	
	C127	QCS21HJ-220	22PF	50V	CERAMIC	
	C128	QETB1EM-226	22MF	25V	ELECTRO	
	C131	QCF21HP-223	0.022MF	50V	CERAMIC	
	C132	QCF21HP-223	0.022MF	50V	CERAMIC	
	C133	QCF21HP-223	0.022MF	50V	CERAMIC	
	C134	QCF21HP-223	0.022MF	50V	CERAMIC	
	C135	QCC21EM-223	0.022MF	25V	CERAMIC	
	C136	QCF21HP-223	0.022MF	50V	CERAMIC	
	C139	QETB1HM-105	1MF	50V	ELECTRO	
	C140	QCS21HJ-101	100PF	50V	CERAMIC	D
	C140	QCS21HJ-101	100PF	50V	CERAMIC	E
	C140	QCS21HJ-101	100PF	50V	CERAMIC	F
	C140	QCS21HJ-221	220PF	50V	CERAMIC	A
	C140	QCS21HJ-221	220PF	50V	CERAMIC	C
	C141	QCF21HP-223	0.022MF	50V	CERAMIC	
	C142	QETB1EM-106	10MF	25V	ELECTRO	
	C144	QFN81HK-332	3300PF	50V	MYLAR	
	C145	QETB1HM-225	2.2MF	50V	ELECTRO	
	C146	QETB1HM-475	4.7MF	50V	ELECTRO	
	C147	QCF21HP-223	0.022MF	50V	CERAMIC	
	C148	QETB1EM-106	10MF	25V	ELECTRO	
	C149	QCF21HP-223	0.022MF	50V	CERAMIC	
	C150	QCY21HK-102	1000PF	50V	CERAMIC	
	C151	QCS21HJ-101	100PF	50V	CERAMIC	
	C152	QCF21HP-103	0.01MF	50V	CERAMIC	
	C153	QCS21HJ-101	100PF	50V	CERAMIC	
	C154	QCS21HJ-470	47PF	50V	CERAMIC	
	C155	QCF21HP-223	0.022MF	50V	CERAMIC	
	C156	QETB1HM-475	4.7MF	50V	ELECTRO	
	C161	QCF21HP-223	0.022MF	50V	CERAMIC	A
	C171	QFN81HK-103	0.01MF	50V	MYLAR	D
	C171	QFN81HK-103	0.01MF	50V	MYLAR	E
	C171	QFN81HK-103	0.01MF	50V	MYLAR	F
	C171	QFN81HK-223	0.022MF	50V	MYLAR	A
	C171	QFN81HK-223	0.022MF	50V	MYLAR	C
	C172	QETB1EM-106	10MF	25V	ELECTRO	
	C173	QFN81HK-473	0.047MF	50V	MYLAR	
	C174	QETB1EM-106	10MF	25V	ELECTRO	
	C175	QCS21HJ-181	180PF	50V	CERAMIC	D
	C175	QCS21HJ-181	180PF	50V	CERAMIC	E
	C175	QCS21HJ-181	180PF	50V	CERAMIC	F
	C175	QCS21HJ-561	560PF	50V	CERAMIC	A
	C175	QCS21HJ-561	560PF	50V	CERAMIC	C
	C176	QCS21HJ-181	180PF	50V	CERAMIC	D
	C176	QCS21HJ-181	180PF	50V	CERAMIC	E
	C176	QCS21HJ-181	180PF	50V	CERAMIC	F
	C176	QCS21HJ-561	560PF	50V	CERAMIC	A
	C176	QCS21HJ-561	560PF	50V	CERAMIC	C
	C177	QETB1HM-225	2.2MF	50V	ELECTRO	
	C178	QETB1HM-225	2.2MF	50V	ELECTRO	
	C179	QETB1HM-225	2.2MF	50V	ELECTRO	
	C180	QETB1HM-105	1MF	50V	ELECTRO	
	C181	QETB1HM-105	1MF	50V	ELECTRO	
	C182	QETB1HM-474	0.47MF	50V	ELECTRO	
	C183	QETB1HM-225	2.2MF	50V	ELECTRO	
	C185	QCY21HK-102	1000PF	50V	CERAMIC	
	C191	QETB1EM-107	100MF	25V	ELECTRO	
	C202	QCC21EM-223	0.022MF	25V	CERAMIC	
	C203	QCS21HJ-561	560PF	50V	CERAMIC	
	C205	QCF21HP-223	0.022MF	50V	CERAMIC	
	C206	QCT26CH-100	10PF	50V	CERAMIC	
	C207	QCT26CH-221	220PF	50V	CERAMIC	
	C208	QCT26CH-271	270PF	50V	CERAMIC	
	C209	QCF21HP-223	0.022MF	50V	CERAMIC	
	C210	QETB1EM-106	10MF	25V	ELECTRO	
	C211	QETB1EM-106	10MF	25V	ELECTRO	
	C212	QCF21HP-103	0.01MF	50V	CERAMIC	
	C213	QCT26CH-100	10PF	50V	CERAMIC	
	C221	QCS21HJ-330	33PF	50V	CERAMIC	E
	C222	QCC21EM-473	0.047MF	25V	CERAMIC	E
	C223	QCY21HK-272	2700PF	50V	CERAMIC	E
	C225	QCT26CH-680	68PF	50V	CERAMIC	E
	C226	QCT26CH-151	150PF	50V	CERAMIC	E

Capacitors

⚠	ITEM	PART NUMBER	DESCRIPTION			AREA
	C227	QCT26CH-150	15PF	50V	CERAMIC	E
	C228	QETB1EM-106	10MF	25V	ELECTRO	E
	C229	QCT26CH-7R0	7.0PF	50V	CERAMIC	E
	C241	QCS21HJ-180	18PF	50V	CERAMIC	
	C242	QCS21HJ-180	18PF	50V	CERAMIC	
	C243	QEN51HM-474	0.47MF	50V	NON POLE	
	C244	QCY21HK-102	1000PF	50V	CERAMIC	
	C247	QCC21EM-473	0.047MF	25V	CERAMIC	
	TC101	ENZ1003-003			TRIMMER	
	TC102	ENZ1003-003			TRIMMER	
	TC201	ENZ1003-006			TRIMMER	
	TC221	ENZ1003-006			TRIMMER	E

Resistors

⚠	ITEM	PART NUMBER	DESCRIPTION			AREA
	R101	QRD161J-473	47K	1/6W	CARBON	
	R102	QRD161J-330	33	1/6W	CARBON	
	R103	QRD161J-473	47K	1/6W	CARBON	
	R104	QRD161J-223	22K	1/6W	CARBON	
	R105	QRD161J-332	3.3K	1/6W	CARBON	
	R106	QRD161J-102	1K	1/6W	CARBON	
	R107	QRD161J-102	1K	1/6W	CARBON	
	R108	QRD161J-330	33	1/6W	CARBON	
	R109	QRD161J-331	330	1/6W	CARBON	
	R110	QRD161J-224	220K	1/6W	CARBON	
	R111	QRD161J-472	4.7K	1/6W	CARBON	
	R112	QRD161J-103	10K	1/6W	CARBON	
	R113	QRD161J-682	6.8K	1/6W	CARBON	
	R114	QRD161J-222	2.2K	1/6W	CARBON	
	R115	QRD161J-561	560	1/6W	CARBON	
	R116	QRD161J-221	220	1/6W	CARBON	
	R117	QRD161J-224	220K	1/6W	CARBON	F
	R118	QRD161J-331	330	1/6W	CARBON	F
	R131	QRD161J-332	3.3K	1/6W	CARBON	
	R132	QRD161J-221	220	1/6W	CARBON	
	R133	QRD161J-391	390	1/6W	CARBON	
	R134	QRD161J-272	2.7K	1/6W	CARBON	
	R135	QRD161J-681	680	1/6W	CARBON	
	R136	QRD161J-102	1K	1/6W	CARBON	
	R137	QRD161J-332	3.3K	1/6W	CARBON	
	R138	QRD161J-221	220	1/6W	CARBON	
	R139	QRD161J-183	18K	1/6W	CARBON	A
	R140	QRD161J-561	560	1/6W	CARBON	
	R141	QRD161J-473	47K	1/6W	CARBON	
	R142	QRD161J-123	12K	1/6W	CARBON	
	R143	QRD161J-103	10K	1/6W	CARBON	A
	R143	QRD161J-103	10K	1/6W	CARBON	C
	R143	QRD161J-473	47K	1/6W	CARBON	D
	R143	QRD161J-473	47K	1/6W	CARBON	E
	R143	QRD161J-473	47K	1/6W	CARBON	F
	R144	QRD161J-103	10K	1/6W	CARBON	
	R145	QRD161J-103	10K	1/6W	CARBON	
	R146	QRD161J-224	220K	1/6W	CARBON	
	R147	QRD161J-391	390	1/6W	CARBON	
	R150	QRD161J-152	1.5K	1/6W	CARBON	
	R151	QRD161J-154	150K	1/6W	CARBON	
	R152	QRD161J-562	5.6K	1/6W	CARBON	
	R153	QRD161J-332	3.3K	1/6W	CARBON	
	R154	QRD161J-561	560	1/6W	CARBON	
	R155	QRD161J-221	220	1/6W	CARBON	
	R156	QRD161J-102	1K	1/6W	CARBON	
	R157	QRD161J-822	8.2K	1/6W	CARBON	
	R162	QRD161J-103	10K	1/6W	CARBON	A
	R163	QRD161J-101	100	1/6W	CARBON	A
	R164	QRD161J-221	220	1/6W	CARBON	A
	R171	QRD161J-393	39K	1/6W	CARBON	A
	R171	QRD161J-393	39K	1/6W	CARBON	C
	R172	QRD161J-124	120K	1/6W	CARBON	A
	R172	QRD161J-124	120K	1/6W	CARBON	C
	R172	QRD161J-274	270K	1/6W	CARBON	D
	R172	QRD161J-274	270K	1/6W	CARBON	E
	R172	QRD161J-274	270K	1/6W	CARBON	F
	R173	QRD161J-124	120K	1/6W	CARBON	A
	R173	QRD161J-124	120K	1/6W	CARBON	C
	R173	QRD161J-274	270K	1/6W	CARBON	D
	R173	QRD161J-274	270K	1/6W	CARBON	E
	R173	QRD161J-274	270K	1/6W	CARBON	F
	R174	QRD161J-332	3.3K	1/6W	CARBON	
	R175	QRD161J-332	3.3K	1/6W	CARBON	
	R176	QRD161J-184	180K	1/6W	CARBON	A

Resistors

⚠	ITEM	PART NUMBER	DESCRIPTION			AREA
	R176	QRD161J-184	180K	1/6W	CARBON	C
	R176	QRD161J-334	330K	1/6W	CARBON	D
	R176	QRD161J-334	330K	1/6W	CARBON	E
	R176	QRD161J-334	330K	1/6W	CARBON	F
	R177	QRD161J-184	180K	1/6W	CARBON	A
	R177	QRD161J-184	180K	1/6W	CARBON	C
	R177	QRD161J-334	330K	1/6W	CARBON	D
	R177	QRD161J-334	330K	1/6W	CARBON	E
	R177	QRD161J-334	330K	1/6W	CARBON	F
	R178	QRD161J-332	3.3K	1/6W	CARBON	D
	R178	QRD161J-682	6.8K	1/6W	CARBON	A
	R178	QRD161J-682	6.8K	1/6W	CARBON	C
	R178	QRD161J-682	6.8K	1/6W	CARBON	E
	R178	QRD161J-682	6.8K	1/6W	CARBON	F
	R179	QRD161J-332	3.3K	1/6W	CARBON	D
	R179	QRD161J-682	6.8K	1/6W	CARBON	A
	R179	QRD161J-682	6.8K	1/6W	CARBON	C
	R179	QRD161J-682	6.8K	1/6W	CARBON	E
	R179	QRD161J-682	6.8K	1/6W	CARBON	F
	R180	QRD161J-472	4.7K	1/6W	CARBON	
	R181	QRD161J-472	4.7K	1/6W	CARBON	
	R182	QRD161J-103	10K	1/6W	CARBON	
	R183	QRD161J-473	47K	1/6W	CARBON	
	R184	QRD161J-473	47K	1/6W	CARBON	
	R185	QRD161J-562	5.6K	1/6W	CARBON	
	R186	QRD161J-103	10K	1/6W	CARBON	
	R187	QRD161J-562	5.6K	1/6W	CARBON	
	R201	QRD161J-103	10K	1/6W	CARBON	
	R202	QRD161J-473	47K	1/6W	CARBON	
	R203	QRD161J-471	470	1/6W	CARBON	
	R205	QRD161J-103	10K	1/6W	CARBON	E
	R206	QRD161J-103	10K	1/6W	CARBON	E
	R207	QRD161J-330	33	1/6W	CARBON	
	R221	QRD161J-103	10K	1/6W	CARBON	E
	R222	QRD161J-473	47K	1/6W	CARBON	E
	R223	QRD161J-471	470	1/6W	CARBON	E
	R225	QRD161J-103	10K	1/6W	CARBON	E
	R226	QRD161J-472	4.7K	1/6W	CARBON	E
	R241	QRD161J-473	47K	1/6W	CARBON	
	R242	QRD161J-103	10K	1/6W	CARBON	
	R243	QRD161J-103	10K	1/6W	CARBON	
	R244	QRD161J-103	10K	1/6W	CARBON	E
	R245	QRD161J-103	10K	1/6W	CARBON	A
	R245	QRD161J-103	10K	1/6W	CARBON	C
	R245	QRD161J-103	10K	1/6W	CARBON	D
	R245	QRD161J-103	10K	1/6W	CARBON	F
	R245	QRD161J-222	2.2K	1/6W	CARBON	E
	R246	QRD161J-271	270	1/6W	CARBON	
	R247	QRD161J-332	3.3K	1/6W	CARBON	A
	R247	QRD161J-332	3.3K	1/6W	CARBON	C
	R247	QRD161J-332	3.3K	1/6W	CARBON	D
	R247	QRD161J-332	3.3K	1/6W	CARBON	F
	R247	QRD161J-822	8.2K	1/6W	CARBON	E
	R248	QRD161J-222	2.2K	1/6W	CARBON	
	R249	QRD161J-472	4.7K	1/6W	CARBON	
	R252	QRD161J-222	2.2K	1/6W	CARBON	
	R253	QRD161J-473	47K	1/6W	CARBON	
	R254	QRD161J-473	47K	1/6W	CARBON	
	R255	QRD161J-473	47K	1/6W	CARBON	E
	VR171	QVZ3518-104			VARIABLE	D
	VR171	QVZ3518-104			VARIABLE	E
	VR171	QVZ3518-104			VARIABLE	F

Others

⚠	ITEM	PART NUMBER	DESCRIPTION	AREA
		EMB01YV-401K	ANTENNA. TERMINAL	A
		EMB01YV-401K	ANTENNA. TERMINAL	C
		EMB01YV-401K	ANTENNA. TERMINAL	D
		EMB01YV-401K	ANTENNA. TERMINAL	E
		EMB01YV-402K	ANTENNA. TERMINAL	F
		E11227-102	CIRCUIT BOARD	
		E304180-001	SHIELD CASE	
		E70225-001	EARTH PLATE	
	J031	EMZ1004-001	SOCKET	A
	J102	EMV7112-006	SOCKET WIRE	
	J103	EMV7112-007	SOCKET WIRE	
	J411	EMV7112-004	SOCKET WIRE	
	J413	EMV7112-003	SOCKET WIRE	C
	L101	EQR2306-014	RF COIL	A
	L101	EQR2306-014	RF COIL	C
	L101	EQR2306-014	RF COIL	D
	L101	EQR2306-014	RF COIL	E
	L101	EQR2306-016	ANT.COIL	F
	L102	EQR2106-014	RF COIL	
	L103	EQR2406-004	RF COIL	
	L104	EQL3001-1R5KY	INDUCTOR	
	L201	EQR1111-006	RF COIL	
	L202	EQR1207-009	RF COIL	
	L221	EQR1111-005	RF COIL	E
	L222	EQR1307-002	RF COIL	E

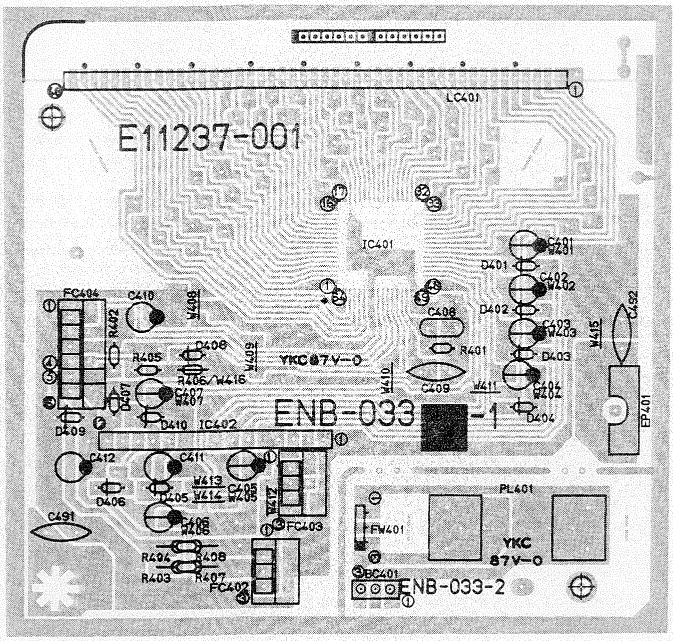
Others

⚠	ITEM	PART NUMBER	DESCRIPTION	AREA
	S101	QSS1201-039	SLIDE SWITCH	C
	T131	EQT2140-012	I.F.TRANSFORMER	
	T132	EQT2140-013	I.F.TRANSFORMER	
	T133	ECB1560-002	CERAMIC FILTER	
	CF131	ECB2118-001R	CERAMIC FILTER	D
	CF131	ECB2118-001R	CERAMIC FILTER	E
	CF131	ECB2118-001R	CERAMIC FILTER	F
	CF131	ECB2123-001R	CERAMIC FILTER	A
	CF131	ECB2123-001R	CERAMIC FILTER	C
	CF132	ECB2118-001R	CERAMIC FILTER	D
	CF132	ECB2118-001R	CERAMIC FILTER	E
	CF132	ECB2118-001R	CERAMIC FILTER	F
	CF132	ECB2123-001R	CERAMIC FILTER	A
	CF132	ECB2123-001R	CERAMIC FILTER	C
⚠	CP101	ICP-N5	I.C.PROTECTOR	D
⚠	CP101	ICP-N5	I.C.PROTECTOR	E
⚠	CP101	ICP-N5	I.C.PROTECTOR	F
	LP171	EQF0101-002	FILTER	
	LP172	EQF0102-001	FILTER	F
	SF101	EQF0201-006	FILTER	F
	TP101	E67764-002	TERMINAL ASSY	
	TP102	E67764-002	TERMINAL ASSY	
	XT171	ECX0000-456KR	RESONATOR	
	XT241	ECX0007-200KC	CRYSTAL	

⚠: Safety Parts

■ENB-033☐ LCD P.C. Board Ass'y

Note:ENB-033☐ varies according to the areas employed. See. note (1) when placing an order.


E11237-001
LC401
IC401
IC402
FC404
FC403
FC402
C410
R402
W408
R405
D408
W409
R406/W416
C407
W407
D407
D409
D410
YKC87V-0
ENB-033■-1
C408
R401
C409
W410
W411
D401
C401
W401
C402
W402
D402
C403
W403
D403
C404
W404
D404
W415
C492
EP401
C412
C411
W413
W414
C405
W405
D405
D406
W412
C491
C406
W406
R404
R408
R403
R407
PL401
FW401
BC401
YKC
87V-0
ENB-033-2

Note (1)

P.C. Board Ass'y	Designated Areas
ENB-033 G	U.S.A, Canada U.S. Military Market & Other Countries
ENB-033 H	Europe, Australia, U.K. West Germany

I.C.S.

⚠	ITEM	PART NUMBER	DESCRIPTION	MAKER	AREA
	IC401	LC7560	I.C.	SANYO	

Diodes

⚠	ITEM	PART NUMBER	DESCRIPTION	MAKER	AREA
	D408	1SS133	SILICON	ROHM	

Capacitors

⚠	ITEM	PART NUMBER	DESCRIPTION			AREA
	C408	QFN81HJ-103	0.01MF	50V	MYLAR	
	C409	QCF21HP-223	0.022MF	50V	CERAMIC	
	C410	QETB1HM-475	4.7MF	50V	ELECTRO	

Resistors

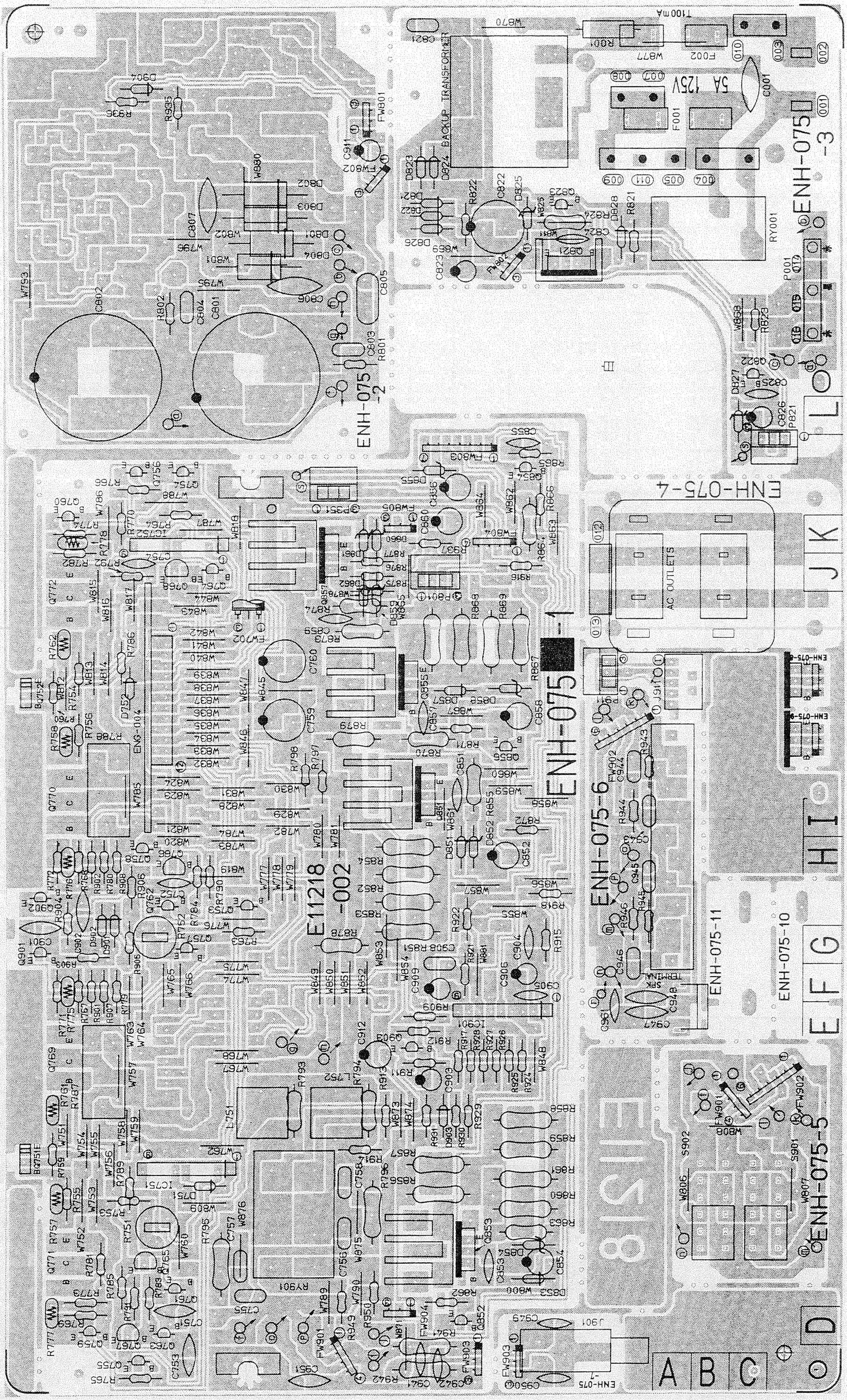
⚠	ITEM	PART NUMBER	DESCRIPTION			AREA
	R401	QRD161J-273	27K	1/6W	CARBON	
	R402	QRD161J-331	330	1/6W	CARBON	
	R405	QRD161J-121	120	1/6W	CARBON	

Others

⚠	ITEM	PART NUMBER	DESCRIPTION	AREA
		E11237-001	CIRCUIT BOARD	
		E45524-002	FUSE CLIP	
	FC404	EMV7112-005	SOCKET WIRE	G
	FC404	EMV7112-005	SOCKET WIRE	H
	LC401	ELU0002-014	LCD PANEL	

■ENH-075□ Audio P.C. Board Ass'y

Note:ENH-075□ varies according to the areas employed. See note (1) when placing an order.


ENH-075□-3
ENH-075-2
ENH-075■-1
ENH-075-4
ENH-075-5
ENH-075-6
ENH-075-10
ENH-075-11
E11218-002
BACKUP TRANSFORMER
T100mA
5A 125V
F001
F002
RY001
RY901
AC OUTLETS
SPK TERMINAL
A
B
C
D
E
F
G
H
I
J
K
L

Note (1)

P.C. Board Ass'y	Designated Areas
ENH-075 A	U.S.A.
ENH-075 B	Canada
ENH-075 C	U.S. Military Market & other Countries
ENH-075 D	Europe, Australia
ENH-075 EBS	U.K.
ENH-075 F	West Germany

Transistors

⚠	ITEM	PART NUMBER	DESCRIPTION	MAKER	AREA
	Q751	2SD636(Q,R)	SILICON	MATSUSHITA	
	Q752	2SD636(Q,R)	SILICON	MATSUSHITA	
	Q753	2SC1740LN(R,S)	SILICON	ROHM	
	Q754	2SC1740LN(R,S)	SILICON	ROHM	
	Q755	2SA933LN(R,S)	SILICON	ROHM	
	Q756	2SA933LN(R,S)	SILICON	ROHM	
	Q757	2SC1740LN(R,S)	SILICON	ROHM	
	Q758	2SC1740LN(R,S)	SILICON	ROHM	
	Q759	2SA933LN(R,S)	SILICON	ROHM	
	Q760	2SA933LN(R,S)	SILICON	ROHM	
	Q761	2SC2389(S,E)	SILICON	ROHM	
	Q762	2SC2389(S,E)	SILICON	ROHM	
	Q763	2SA1038(S,E)	SILICON	ROHM	
	Q764	2SA1038(S,E)	SILICON	ROHM	
	Q765	2SC2235(O,Y)	SILICON	TOSHIBA	
	Q766	2SC2235(O,Y)	SILICON	TOSHIBA	
	Q767	2SA965(O,Y)	SILICON	TOSHIBA	
	Q768	2SA965(O,Y)	SILICON	TOSHIBA	
	Q769	2SD1148LB(O,R)	SILICON	TOSHIBA	
	Q770	2SD1148LB(O,R)	SILICON	TOSHIBA	
	Q771	2SB863LB(O,R)	SILICON	TOSHIBA	
	Q772	2SB863LB(O,R)	SILICON	TOSHIBA	
	Q821	2SD1265A(O)	SILICON	MATSUSHITA	C
	Q822	2SC2235(O,Y)	SILICON	TOSHIBA	
	Q823	DTC114YN	SILICON	ROHM	
	Q851	2SD1666(R,S)	SILICON	SANYO	
	Q852	2SC1740LN(R,S)	SILICON	ROHM	
	Q853	2SD1666(R,S)	SILICON	SANYO	
	Q854	2SC1740LN(R,S)	SILICON	ROHM	
	Q855	2SB1133(R,S)	SILICON	SANYO	
	Q857	2SB1133(R,S)	SILICON	SANYO	
	Q901	2SC2389(S,E)	SILICON	ROHM	
	Q902	2SC2389(S,E)	SILICON	ROHM	
	Q903	2SA1038(S,E)	SILICON	ROHM	

I.C.S.

⚠	ITEM	PART NUMBER	DESCRIPTION	MAKER	AREA
	IC751	VC5022-2	I.C.	SANYO	
	IC752	VC5022-2	I.C.	SANYO	
	IC901	TA7317P	I.C.	TOSHIBA	

Diodes

⚠	ITEM	PART NUMBER	DESCRIPTION	MAKER	AREA
	D751	1S2473	SILICON	ROHM	
	D752	1S2473	SILICON	ROHM	
⚠	D801	S3V20F	SILICON		
⚠	D802	S3V20F	SILICON		
⚠	D803	S3V20F	SILICON		
⚠	D804	S3V20F	SILICON		
⚠	D821	11E2	SILICON	NIHONINTER	
⚠	D822	11E2	SILICON	NIHONINTER	
⚠	D823	11E2	SILICON	NIHONINTER	
⚠	D824	11E2	SILICON	NIHONINTER	

⚠: Safety Parts

Diodes

⚠	ITEM	PART NUMBER	DESCRIPTION	MAKER	AREA
	D825	RD12EB3	ZENER	NEC	C
	D826	1S2473	SILICON	ROHM	
	D827	RD6.2EB3	ZENER	NEC	
	D828	RD12EB3	ZENER	NEC	D
	D828	1S2473	SILICON	ROHM	A
	D828	1S2473	SILICON	ROHM	B
	D828	1S2473	SILICON	ROHM	C
	D828	1S2473	SILICON	ROHM	EBS
	D828	1S2473	SILICON	ROHM	F
	D851	1S2473	SILICON	ROHM	
	D852	RD16EB3	ZENER	NEC	
	D853	1S2473	SILICON	ROHM	D
	D853	1S2473	SILICON	ROHM	EBS
	D853	1S2473	SILICON	ROHM	F
	D854	RD13EB3	ZENER	NEC	
	D855	RD5.6EB3	ZENER	NEC	
	D857	1S2473	SILICON	ROHM	
	D858	RD16EB3	ZENER	NEC	
	D859	RD12EB3	ZENER	NEC	
	D860	RD12EB3	ZENER	NEC	
	D861	RD8.2EB3	ZENER	NEC	
	D862	1S2473	SILICON	ROHM	D
	D862	1S2473	SILICON	ROHM	EBS
	D862	1S2473	SILICON	ROHM	F
	D901	1S2473	SILICON	ROHM	
	D902	1S2473	SILICON	ROHM	
	D903	1S2473	SILICON	ROHM	
	D904	1S2473	SILICON	ROHM	

Capacitors

⚠	ITEM	PART NUMBER	DESCRIPTION			AREA
⚠	C001	QCZ9019-472	4700PF		CERAMIC	A
⚠	C001	QCZ9019-472	4700PF		CERAMIC	B
⚠	C001	QCZ9019-472	4700PF		CERAMIC	C
⚠	C001	QCZ9019-472	4700PF		CERAMIC	D
⚠	C001	QCZ9019-472	4700PF		CERAMIC	F
⚠	C001	QCZ9019-472BS	4700PF		CERAMIC	EBS
	C751	QCS21HJ-470	47PF	50V	CERAMIC	
	C752	QCS21HJ-470	47PF	50V	CERAMIC	
	C753	QCS21HJ-470	47PF	50V	CERAMIC	
	C754	QCS21HJ-470	47PF	50V	CERAMIC	
	C755	QFN81HK-223	0.022MF	50V	MYLAR	A
	C755	QFN81HK-223	0.022MF	50V	MYLAR	C
	C755	QFN81HK-473	0.047MF	50V	MYLAR	B
	C755	QFN81HK-473	0.047MF	50V	MYLAR	D
	C755	QFN81HK-473	0.047MF	50V	MYLAR	EBS
	C755	QFN81HK-473	0.047MF	50V	MYLAR	F
	C756	QFN81HK-223	0.022MF	50V	MYLAR	A
	C756	QFN81HK-223	0.022MF	50V	MYLAR	C
	C756	QFN81HK-473	0.047MF	50V	MYLAR	B
	C756	QFN81HK-473	0.047MF	50V	MYLAR	D
	C756	QFN81HK-473	0.047MF	50V	MYLAR	EBS
	C756	QFN81HK-473	0.047MF	50V	MYLAR	F
	C757	QFN81HK-473	0.047MF	50V	MYLAR	B
	C757	QFN81HK-473	0.047MF	50V	MYLAR	D
	C757	QFN81HK-473	0.047MF	50V	MYLAR	EBS
	C757	QFN81HK-473	0.047MF	50V	MYLAR	F
	C758	QFN81HK-473	0.047MF	50V	MYLAR	B
	C758	QFN81HK-473	0.047MF	50V	MYLAR	D
	C758	QFN81HK-473	0.047MF	50V	MYLAR	EBS
	C758	QFN81HK-473	0.047MF	50V	MYLAR	F
	C759	QETB1JM-226	22MF	63V	ELECTRO	
	C760	QETB1JM-226	22MF	63V	ELECTRO	
	C801	QEZ0075-878E	8700MF		NON POLE	
	C802	QEZ0075-878E	8700MF		NON POLE	
	C805	QCE22HP-103	0.01MF	500V	CERAMIC	A
	C805	QCE22HP-103	0.01MF	500V	CERAMIC	B
	C805	QCE22HP-103	0.01MF	500V	CERAMIC	C
	C805	QFH42EK-104	0.1MF			D
	C805	QFH42EK-104	0.1MF			EBS
	C805	QFH42EK-104	0.1MF			F
	C806	QCE22HP-103	0.01MF	500V	CERAMIC	
	C807	QCE22HP-103	0.01MF	500V	CERAMIC	
	C821	QFN81HK-473	0.047MF	50V	MYLAR	
	C822	QETB1CM-477	470MF	16V	ELECTRO	A
	C822	QETB1CM-477	470MF	16V	ELECTRO	B
	C822	QETB1CM-477	470MF	16V	ELECTRO	D
	C822	QETB1CM-477	470MF	16V	ELECTRO	EBS
	C822	QETB1CM-477	470MF	16V	ELECTRO	F
	C822	QETB1JM-227	220MF	63V	ELECTRO	C

⚠: Safety Parts

Capacitors

⚠	ITEM	PART NUMBER	DESCRIPTION			AREA
	C823	QETB1HM-105	1MF	50V	ELECTRO	
	C824	QCF21HP-472	4700PF	50V	CERAMIC	C
	C825	QCF21HP-472	4700PF	50V	CERAMIC	
	C826	QETB1CM-476	47MF	16V	ELECTRO	
	C851	QCF21HP-472	4700PF	50V	CERAMIC	
	C852	QETB1EM-227	220MF	25V	ELECTRO	
	C853	QCF21HP-472	4700PF	50V	CERAMIC	
	C854	QETB1EM-107	100MF	25V	ELECTRO	
	C855	QCF21HP-472	4700PF	50V	CERAMIC	
	C856	QETB1EM-476	47MF	25V	ELECTRO	
	C857	QCF21HP-472	4700PF	50V	CERAMIC	
	C858	QETB1EM-227	220MF	25V	ELECTRO	
	C859	QCF21HP-472	4700PF	50V	CERAMIC	
	C860	QETB1HM-476	47MF	50V	ELECTRO	
	C901	QCF21HP-223	0.022MF	50V	CERAMIC	
	C902	QCF21HP-223	0.022MF	50V	CERAMIC	
	C903	QETB1EM-226	22MF	25V	ELECTRO	
	C904	QCF21HP-223	0.022MF	50V	CERAMIC	
	C905	QCY21HK-102	1000PF	50V	CERAMIC	
	C906	QETB1AM-476	47MF	10V	ELECTRO	
	C909	QETB1CM-226	22MF	16V	ELECTRO	
	C911	QETB1HM-105	1MF	50V	ELECTRO	
	C941	QCS21HJ-331	330PF	50V	CERAMIC	F
	C942	QCS21HJ-331	330PF	50V	CERAMIC	F
	C943	QFN81HK-103	0.01MF	50V	MYLAR	F
	C944	QFN81HK-103	0.01MF	50V	MYLAR	F
	C945	QFN81HK-103	0.01MF	50V	MYLAR	F
	C946	QFN81HK-103	0.01MF	50V	MYLAR	F
	C947	QCF21HP-103	0.01MF	50V	CERAMIC	F
	C948	QCF21HP-103	0.01MF	50V	CERAMIC	F
	C949	QCS21HJ-151	150PF	50V	CERAMIC	F
	C950	QCS21HJ-151	150PF	50V	CERAMIC	F
	C951	QCF21HP-103	0.01MF	50V	CERAMIC	F
	C961	QCF21HP-223	0.022MF	50V	CERAMIC	

Resistors

⚠	ITEM	PART NUMBER	DESCRIPTION			AREA
⚠	R001	QRC128K-275EM	2.7M	1/2W	COMPOSI	A
⚠	R001	QRC128K-275EM	2.7M	1/2W	COMPOSI	B
	R751	QVP4A0B-471			VARIABLE	
	R752	QVP4A0B-471			VARIABLE	
	R753	QRD148J-471S	470	1/4W	CARBON	
	R754	QRD148J-471S	470	1/4W	CARBON	
	R755	QRD148J-101S	100	1/4W	CARBON	
	R756	QRD148J-101S	100	1/4W	CARBON	
	R757	ERT-D2WFL351S			THERMISTER	
	R758	ERT-D2WFL351S			THERMISTER	
	R759	QRD148J-391S	390	1/4W	CARBON	
	R760	QRD148J-391S	390	1/4W	CARBON	
	R761	SDT250			THERMISTER	
	R762	SDT250			THERMISTER	
	R763	QRD148J-102S	1K	1/4W	CARBON	
	R764	QRD148J-102S	1K	1/4W	CARBON	
	R765	QRD148J-102S	1K	1/4W	CARBON	
	R766	QRD148J-102S	1K	1/4W	CARBON	
	R767	QRD148J-101S	100	1/4W	CARBON	
	R768	QRD148J-101S	100	1/4W	CARBON	
	R769	QRD148J-101S	100	1/4W	CARBON	
	R770	QRD148J-101S	100	1/4W	CARBON	
	R775	SDT250			THERMISTER	A
	R775	SDT250			THERMISTER	B
	R776	SDT250			THERMISTER	A
	R776	SDT250			THERMISTER	B
	R777	SDT250			THERMISTER	A
	R777	SDT250			THERMISTER	B
	R778	SDT250			THERMISTER	A
	R778	SDT250			THERMISTER	B
	R779	QRD148J-820S	82	1/4W	CARBON	
	R780	QRD148J-820S	82	1/4W	CARBON	
	R781	QRD148J-820S	82	1/4W	CARBON	
	R782	QRD148J-820S	82	1/4W	CARBON	
⚠	R783	QRD145J-272S	2.7K	1/4W	UNF.CARBON	
⚠	R784	QRD145J-272S	2.7K	1/4W	UNF.CARBON	
⚠	R785	QRD145J-271S	270	1/4W	UNF.CARBON	
⚠	R786	QRD145J-271S	270	1/4W	UNF.CARBON	
	R787	ERF032K-R22			CEMENT	
	R788	ERF032K-R22			CEMENT	
⚠	R789	QRD145J-100S	10	1/4W	UNF.CARBON	
⚠	R790	QRD145J-100S	10	1/4W	UNF.CARBON	
⚠	R791	QRD145J-100S	10	1/4W	UNF.CARBON	
⚠	R792	QRD145J-100S	10	1/4W	UNF.CARBON	
⚠	R793	QRD125J-330	33	1/2W	UNF.CARBON	A

⚠ : Safety Parts

Resistors

⚠	ITEM	PART NUMBER	DESCRIPTION			AREA
⚠	R793	QRD125J-330	33	1/2W	UNF.CARBON	B
⚠	R793	QRD125J-330	33	1/2W	UNF.CARBON	C
⚠	R793	QRD125J-330	33	1/2W	UNF.CARBON	D
⚠	R793	QRD125J-330	33	1/2W	UNF.CARBON	EBS
⚠	R793	QRD125J-470	47	1/2W	UNF.CARBON	F
⚠	R794	QRD125J-330	33	1/2W	UNF.CARBON	A
⚠	R794	QRD125J-330	33	1/2W	UNF.CARBON	B
⚠	R794	QRD125J-330	33	1/2W	UNF.CARBON	C
⚠	R794	QRD125J-330	33	1/2W	UNF.CARBON	D
⚠	R794	QRD125J-330	33	1/2W	UNF.CARBON	EBS
⚠	R794	QRD125J-470	47	1/2W	UNF.CARBON	F
⚠	R795	QRG022J-100A	10	2W	O.M.FILM	
⚠	R796	QRG022J-100A	10	2W	O.M.FILM	
⚠	R797	QRD145J-330S	33	1/4W	UNF.CARBON	
⚠	R798	QRD145J-330S	33	1/4W	UNF.CARBON	
	R801	QRD148J-333S	33K	1/4W	CARBON	
	R802	QRD148J-333S	33K	1/4W	CARBON	
⚠	R821	QRD145J-100S	10	1/4W	UNF.CARBON	A
⚠	R821	QRD145J-100S	10	1/4W	UNF.CARBON	B
⚠	R821	QRD145J-3R3S	3.3	1/4W	UNF.CARBON	C
⚠	R821	QRZ0062-100	10	1/4W	FUSIBLE	D
⚠	R821	QRZ0062-100	10	1/4W	FUSIBLE	F
⚠	R821	QRZ0062-220	22	1/4W	FUSIBLE	EBS
	R822	QRD148J-472S	4.7K	1/4W	CARBON	
	R823	QRD148J-821S	820	1/4W	CARBON	
⚠	R824	QRG012J-222A	2.2K	1W	O.M.FILM	C
⚠	R851	QRG022J-561A	560	2W	O.M.FILM	
⚠	R852	QRG022J-681A	680	2W	O.M.FILM	
⚠	R853	QRG022J-561A	560	2W	O.M.FILM	
⚠	R854	QRG022J-681A	680	2W	O.M.FILM	
⚠	R855	QRD125J-562	5.6K	1/2W	UNF.CARBON	
⚠	R856	QRG022J-101AF	100	2W	O.M.FILM	
⚠	R857	QRG022J-101AF	100	2W	O.M.FILM	
⚠	R858	QRG022J-101AF	100	2W	O.M.FILM	
⚠	R859	QRG022J-101AF	100	2W	O.M.FILM	
⚠	R860	QRG022J-820AF	82	2W	O.M.FILM	
⚠	R861	QRG022J-820AF	82	2W	O.M.FILM	
⚠	R862	QRD145J-101S	100	1/4W	UNF.CARBON	A
⚠	R862	QRD145J-101S	100	1/4W	UNF.CARBON	B
⚠	R862	QRD145J-101S	100	1/4W	UNF.CARBON	C
⚠	R862	QRZ0062-101	100	1/4W	FUSIBLE	D
⚠	R862	QRZ0062-101	100	1/4W	FUSIBLE	EBS
⚠	R862	QRZ0062-101	100	1/4W	FUSIBLE	F
⚠	R863	QRD125J-392	3.9K	1/2W	UNF.CARBON	
⚠	R864	QRD125J-180	18	1/2W	UNF.CARBON	
⚠	R865	QRD145J-101S	100	1/4W	UNF.CARBON	A
⚠	R865	QRD145J-101S	100	1/4W	UNF.CARBON	B
⚠	R865	QRD145J-101S	100	1/4W	UNF.CARBON	C
⚠	R865	QRZ0062-101	100	1/4W	FUSIBLE	D
⚠	R865	QRZ0062-101	100	1/4W	FUSIBLE	EBS
⚠	R865	QRZ0062-101	100	1/4W	FUSIBLE	F
	R866	QRD148J-152S	1.5K	1/4W	CARBON	
⚠	R867	QRG022J-471A	470	2W	O.M.FILM	
⚠	R868	QRG022J-471A	470	2W	O.M.FILM	
⚠	R869	QRG022J-471A	470	2W	O.M.FILM	
⚠	R870	QRD125J-562	5.6K	1/2W	UNF.CARBON	
⚠	R873	QRD125J-150	15	1/2W	UNF.CARBON	
⚠	R874	QRD125J-152	1.5K	1/2W	UNF.CARBON	
⚠	R875	QRD145J-680S	68	1/4W	UNF.CARBON	A
⚠	R875	QRD145J-680S	68	1/4W	UNF.CARBON	B
⚠	R875	QRD145J-680S	68	1/4W	UNF.CARBON	C
⚠	R875	QRZ0062-680	68	1/4W	FUSIBLE	D
⚠	R875	QRZ0062-680	68	1/4W	FUSIBLE	EBS
⚠	R875	QRZ0062-680	68	1/4W	FUSIBLE	F
⚠	R876	QRD145J-680S	68	1/4W	UNF.CARBON	A
⚠	R876	QRD145J-680S	68	1/4W	UNF.CARBON	B
⚠	R876	QRD145J-680S	68	1/4W	UNF.CARBON	C
⚠	R876	QRZ0062-680	68	1/4W	FUSIBLE	D
⚠	R876	QRZ0062-680	68	1/4W	FUSIBLE	EBS
⚠	R876	QRZ0062-680	68	1/4W	FUSIBLE	F
⚠	R877	QRD145J-680S	68	1/4W	UNF.CARBON	A
⚠	R877	QRD145J-680S	68	1/4W	UNF.CARBON	B
⚠	R877	QRD145J-680S	68	1/4W	UNF.CARBON	C
⚠	R877	QRZ0062-680	68	1/4W	FUSIBLE	D
⚠	R877	QRZ0062-680	68	1/4W	FUSIBLE	EBS
⚠	R877	QRZ0062-680	68	1/4W	FUSIBLE	F
⚠	R878	QRD125J-2R2	2.2	1/2W	UNF.CARBON	
⚠	R879	QRD125J-2R2	2.2	1/2W	UNF.CARBON	
	R901	QRD148J-681S	680	1/4W	CARBON	
	R902	QRD148J-681S	680	1/4W	CARBON	
	R903	QRD148J-562S	5.6K	1/4W	CARBON	
	R904	QRD148J-562S	5.6K	1/4W	CARBON	
	R905	QRD148J-123S	12K	1/4W	CARBON	
	R906	QRD148J-123S	12K	1/4W	CARBON	
	R907	QRD148J-152S	1.5K	1/4W	CARBON	

⚠ : Safety Parts

Resistors

⚠	ITEM	PART NUMBER	DESCRIPTION			AREA
	R908	QRD148J-152S	1.5K	1/4W	CARBON	
	R909	QRD148J-103S	10K	1/4W	CARBON	
	R911	QRD148J-332S	3.3K	1/4W	CARBON	
	R912	QRD148J-473S	47K	1/4W	CARBON	
	R913	QRD148J-104S	100K	1/4W	CARBON	
	R914	QRD148J-823S	82K	1/4W	CARBON	
	R915	QRD148J-823S	82K	1/4W	CARBON	
	R916	QRD148J-563S	56K	1/4W	CARBON	
	R917	QRD148J-683S	68K	1/4W	CARBON	
	R918	QRD148J-392S	3.9K	1/4W	CARBON	
	R921	QRD148J-224S	220K	1/4W	CARBON	
	R922	QRD148J-562S	5.6K	1/4W	CARBON	
	R924	QRD148J-121S	120	1/4W	CARBON	
	R925	QRD148J-121S	120	1/4W	CARBON	
	R926	QRD148J-121S	120	1/4W	CARBON	
	R927	QRD148J-121S	120	1/4W	CARBON	
	R928	QRD148J-121S	120	1/4W	CARBON	
	R929	QRD148J-820S	82	1/4W	CARBON	
	R930	QRD148J-820S	82	1/4W	CARBON	
⚠	R931	QRD145J-390S	39	1/4W	UNF.CARBON	
	R935	QRD148J-562S	5.6K	1/4W	CARBON	
	R936	QRD148J-822S	8.2K	1/4W	CARBON	
	R937	QRD148J-822S	8.2K	1/4W	CARBON	
⚠	R941	QRG022J-271A	270	2W	O.M.FILM	
⚠	R942	QRG022J-271A	270	2W	O.M.FILM	
⚠	R943	QRZ0062-101	100	1/4W	FUSIBLE	F
⚠	R944	QRZ0062-101	100	1/4W	FUSIBLE	F
⚠	R945	QRZ0062-101	100	1/4W	FUSIBLE	F

Others

⚠	ITEM	PART NUMBER	DESCRIPTION	AREA
		EMB90TV-801A	SPEAKER. TERMINAL	
		EMG7331-001	FUSE CLIP	A
		EMG7331-001	FUSE CLIP	B
		EMG7331-001	FUSE CLIP	D
		EMG7331-001	FUSE CLIP	EBS
		EMG7331-001	FUSE CLIP	F
		ENG-004G	CIRCUIT BOARD ASSY	A
		ENG-004G	CIRCUIT BOARD ASSY	B
		ENG-004G	CIRCUIT BOARD ASSY	C
		ENG-004H	CIRCUIT BOARD ASSY	D
		ENG-004H	CIRCUIT BOARD ASSY	EBS
		ENG-004I	CIRCUIT BOARD ASSY	F
	RYOO1	ESK1D12-113	RELAY	A
	RYOO1	ESK1D12-113	RELAY	B
	RYOO1	ESK1D12-113	RELAY	C
	RYOO1	ESK1D12-113	RELAY	D
	RYOO1	ESK1D12-113	RELAY	F
	RYOO1	ESK1D12-113BS	RELAY	EBS
⚠		ETP1000-41EA	POWER TRANSFORMER	D
⚠		ETP1000-41EA	POWER TRANSFORMER	F
⚠		ETP1000-41EABS	POWER TRANSFORMER	EBS
⚠		ETP1000-41JA	POWER TRANSFORMER	A
⚠		ETP1000-41JA	POWER TRANSFORMER	B
⚠		ETP1000-41ZA	POWER TRANSFORMER	C
		EWH23A-60RR	PARA WIRE	
		E11218-002	CIRCUIT BOARD	A
		E11218-002	CIRCUIT BOARD	B
		E11218-002	CIRCUIT BOARD	C
		E11218-002	CIRCUIT BOARD	D
		E11218-002	CIRCUIT BOARD	F
		E11218-002BS	CIRCUIT BOARD	EBS
		E302267-005	HEAT SINK	
		E304105-001	BRACKET	
		E304105-002	BRACKET	
		E65508-002	TAB	
		E67132-T2R5	FUSE LABEL	D
		E67132-T2R5	FUSE LABEL	EBS
		E67132-T2R5	FUSE LABEL	F
		E67764-102	TERMINAL ASSY	
		E67764-103	TERMINAL	
		E67764-202	TERMINAL	
		E67764-203	TERMINAL ASSY	
		E67764-302	TERMINAL	A
		E67764-302	TERMINAL	B
		E67764-302	TERMINAL	C
		E69826-H22B	HEAT SINK	
		E69826-H22B	HEAT SINK	
		E70225-001	EARTH PLATE	
		E70306-001	HEAT SINK	C
		E70859-001	EARTH PLATE	

⚠: Safety Parts

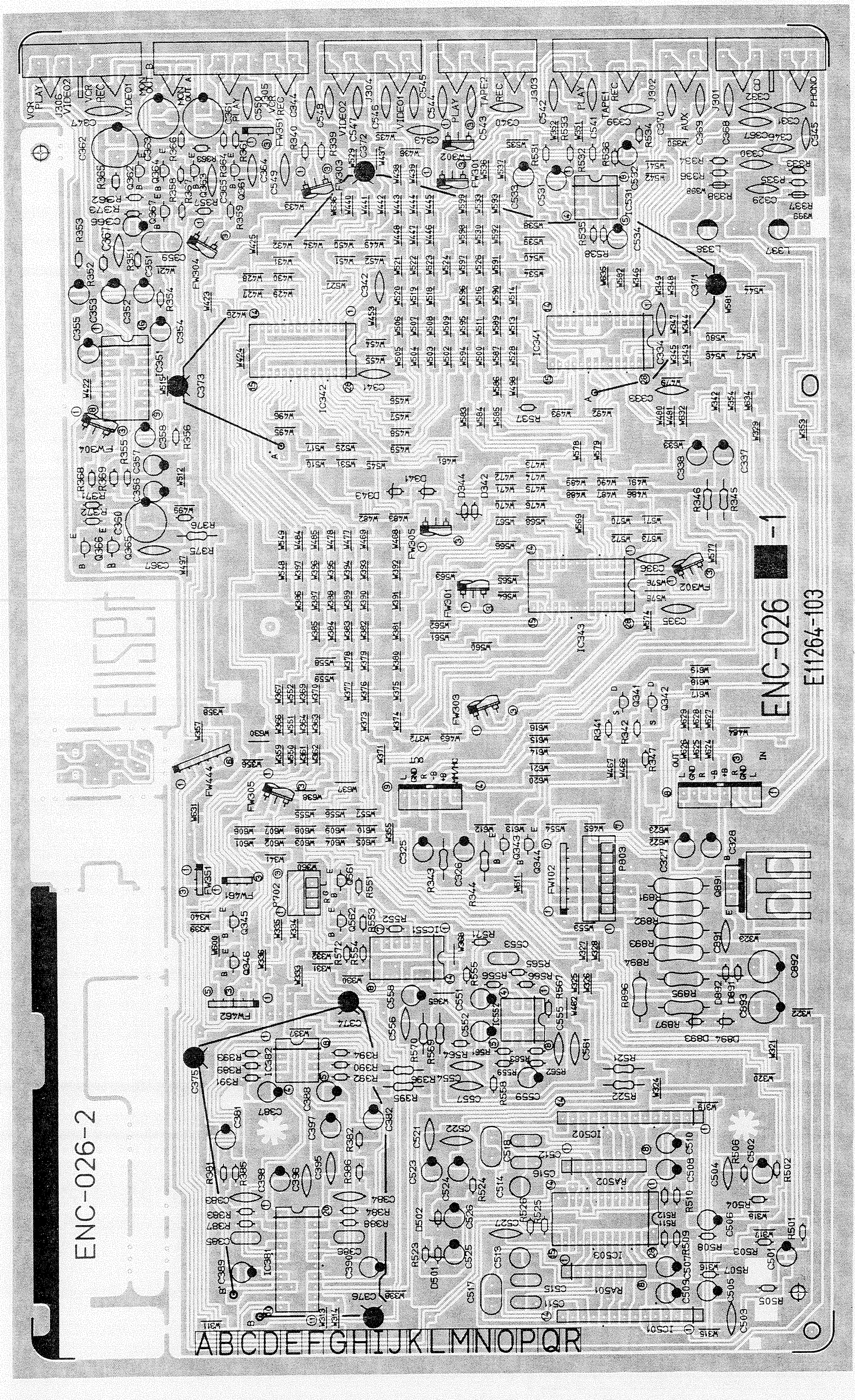
Others

⚠	ITEM	PART NUMBER	DESCRIPTION	AREA
⚠		QMC0437-002	AC SOCKET	A
⚠		QMC0437-002	AC SOCKET	C
⚠		QMC0440-001	AC SOCKET	B
		SBSB3008CC	SCREW	
		SBSB3008Z	SCREW	C
		SBSB3012Z	SCREW	
		SBSB3012Z	SCREW	
		SBSE3012CC	SCREW	
	J901	QMS6A30-021	JACK ASSY	
	J911	QMS3533-001	JACK ASSY	
	L751	EQL0001-1R0	INDUCTOR	
	L752	EQL0001-1R0	INDUCTOR	
	P351	EMV7112-003	SOCKET WIRE	
	P801	EMV7112-003	SOCKET WIRE	
	P821	EMV7112-003	SOCKET WIRE	
	P911	EMV7112-003	SOCKET WIRE	
	S901	QST4231-E03	PUSH SWITCH	
⚠	RY901	ESK5D24-215	RELAY	

⚠: Safety Parts

■ENC-026☐ Pre-Amplifier P.C. Board Ass'y

Note: ENC-026☐ varies according to the areas employed. See note (1) when placing an order.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ENC-026 -1
E11264-103
A B C D E F G H I J K L M N O P Q R
PHONO
CD
AUX
TAPE1
TAPE2
VIDEO1
VIDEO2
VCR
PLAY
REC
MON OUT

NOTE : To replace either C513 or C515, demount both capacitors and mount one QFV81HJ-274 (0.27 μF, T.F. Capacitor).
The same procedure is required to replace C514 or C516.

Note (1)

P.C. Board Ass'y	Designated Areas
ENC-026 🄶	U.S.A., Canada, U.S. Military Market & Other Countries
ENC-026 🄷	Europe, Australia, U.K.
ENC-026 🄸	West Germany

Transistors

⚠	ITEM	PART NUMBER	DESCRIPTION		AREA
				MAKER	
	Q361	2SC458(C,D)	SILICON	HITACHI	
	Q362	2SC458(C,D)	SILICON	HITACHI	
	Q363	2SC458(C,D)	SILICON	HITACHI	
	Q364	2SA733A(P,Q)	SILICON	NEC	
	Q365	DTC144EN	SILICON	ROHM	
	Q366	DTC144EN	SILICON	ROHM	
	Q367	DTC144EN	SILICON	ROHM	
	Q561	DTA114YN	SILICON	ROHM	
	Q562	DTC144EN	SILICON	ROHM	
	Q891	2SD1666(R,S)	SILICON	SANYO	

I.C.S.

⚠	ITEM	PART NUMBER	DESCRIPTION		AREA
				MAKER	
	IC341	TC9164N	I.C.	TOSHIBA	
	IC342	TC9163N	I.C.	TOSHIBA	
	IC351	M51320P	I.C.	MITSUBISHI	
	IC381	TC9177P	I.C.	TOSHIBA	
	IC382	NJM4560D-X	I.C.		
	IC501	7EL-GEQ-001	I.C.		
	IC502	7EL-GEQ-001	I.C.		
	IC503	LC7522	I.C.	SANYO	
	IC531	M5218P	I.C.	MITSUBISHI	
	IC551	LC4966	I.C.	SANYO	
	IC552	M5218P	I.C.	MITSUBISHI	

Diodes

⚠	ITEM	PART NUMBER	DESCRIPTION		AREA
				MAKER	
	D501	MTZ6.8C	ZENER	ROHM	
	D502	MTZ6.8C	ZENER	ROHM	
	D891	1SS133	SILICON	ROHM	
	D892	MTZ13C	ZENER	ROHM	

Capacitors

⚠	ITEM	PART NUMBER	DESCRIPTION			AREA
	C327	QETB1EM-226	22MF	25V	ELECTRO	
	C328	QETB1EM-226	22MF	25V	ELECTRO	
	C331	QCF21HP-223	0.022MF	50V	CERAMIC	
	C332	QCF21HP-223	0.022MF	50V	CERAMIC	
	C333	QCF21HP-223	0.022MF	50V	CERAMIC	
	C334	QCF21HP-223	0.022MF	50V	CERAMIC	
	C337	QETB1EM-476	47MF	25V	ELECTRO	
	C338	QETB1EM-476	47MF	25V	ELECTRO	
	C339	QCF21HP-223	0.022MF	50V	CERAMIC	
	C340	QCF21HP-223	0.022MF	50V	CERAMIC	
	C341	QCF21HP-223	0.022MF	50V	CERAMIC	
	C342	QCF21HP-223	0.022MF	50V	CERAMIC	
	C343	QCF21HP-223	0.022MF	50V	CERAMIC	
	C344	QCF21HP-223	0.022MF	50V	CERAMIC	
	C345	QCS21HJ-221	220PF	50V	CERAMIC	I
	C346	QCS21HJ-221	220PF	50V	CERAMIC	I
	C347	QCF21HP-223	0.022MF	50V	CERAMIC	
	C351	QETB1CM-476	47MF	16V	ELECTRO	
	C352	QETB1CM-476	47MF	16V	ELECTRO	
	C353	QETB1CM-476	47MF	16V	ELECTRO	
	C354	QETB1CM-476	47MF	16V	ELECTRO	
	C355	QETB1CM-476	47MF	16V	ELECTRO	
	C356	QETB1CM-476	47MF	16V	ELECTRO	
	C357	QETB1CM-476	47MF	16V	ELECTRO	
	C358	QETB1CM-476	47MF	16V	ELECTRO	
	C359	QFN81HK-104	0.1MF	50V	MYLAR	
	C360	QETB1CM-108	1000MF	16V	ELECTRO	
	C361	QETB1AM-108	1000MF	10V	ELECTRO	
	C362	QETB1AM-108	1000MF	10V	ELECTRO	
	C363	QETB1AM-108	1000MF	10V	ELECTRO	
	C364	QCS21HJ-270	27PF	50V	CERAMIC	
	C365	QCS21HJ-270	27PF	50V	CERAMIC	
	C366	QETB1EM-106	10MF	25V	ELECTRO	
	C371	QCS21HJ-101	100PF	50V	CERAMIC	
	C372	QCS21HJ-101	100PF	50V	CERAMIC	
	C373	QCS21HJ-101	100PF	50V	CERAMIC	
	C374	QCS21HJ-101	100PF	50V	CERAMIC	
	C375	QCS21HJ-101	100PF	50V	CERAMIC	
	C376	QCS21HJ-101	100PF	50V	CERAMIC	
	C381	QETB1HM-475	4.7MF	50V	ELECTRO	
	C382	QETB1HM-475	4.7MF	50V	ELECTRO	
	C383	QCS21HJ-181	180PF	50V	CERAMIC	
	C384	QCS21HJ-181	180PF	50V	CERAMIC	
	C385	QFN81HK-333	0.033MF	50V	MYLAR	
	C386	QFN81HK-333	0.033MF	50V	MYLAR	
	C387	QETB1HM-105	1MF	50V	ELECTRO	
	C388	QETB1HM-105	1MF	50V	ELECTRO	
	C389	QETB1EM-106	10MF	25V	ELECTRO	
	C390	QETB1EM-106	10MF	25V	ELECTRO	
	C395	QCF21HP-223	0.022MF	50V	CERAMIC	
	C396	QCF21HP-223	0.022MF	50V	CERAMIC	
	C397	QETB1EM-476	47MF	25V	ELECTRO	
	C398	QETB1EM-476	47MF	25V	ELECTRO	
	C501	QETB1HM-475	4.7MF	50V	ELECTRO	
	C502	QETB1HM-475	4.7MF	50V	ELECTRO	
	C503	QCS21HJ-470	47PF	50V	CERAMIC	
	C504	QCS21HJ-470	47PF	50V	CERAMIC	
	C505	QETB1HM-475	4.7MF	50V	ELECTRO	
	C506	QETB1HM-475	4.7MF	50V	ELECTRO	
	C507	QETB1HM-475	4.7MF	50V	ELECTRO	
	C508	QETB1HM-475	4.7MF	50V	ELECTRO	
	C509	QETB1HM-475	4.7MF	50V	ELECTRO	
	C510	QETB1HM-475	4.7MF	50V	ELECTRO	
	C511	QFN81HK-104	0.1MF	50V	MYLAR	
	C512	QFN81HK-104	0.1MF	50V	MYLAR	
	C515	QFV81HJ-274	0.27MF	50V	T.FILM	
	C516	QFV81HJ-274	0.27MF	50V	T.FILM	
	C517	QFV81HJ-684	0.68MF	50V	T.FILM	
	C518	QFV81HJ-684	0.68MF	50V	T.FILM	
	C521	QCF21HP-223	0.022MF	50V	CERAMIC	
	C522	QCF21HP-223	0.022MF	50V	CERAMIC	
	C523	QETB1HM-475	4.7MF	50V	ELECTRO	
	C524	QETB1HM-475	4.7MF	50V	ELECTRO	
	C525	QETB1HM-475	4.7MF	50V	ELECTRO	
	C526	QETB1HM-475	4.7MF	50V	ELECTRO	
	C527	QCF21HP-223	0.022MF	50V	CERAMIC	
	C531	QETB1EM-106	10MF	25V	ELECTRO	
	C532	QETB1EM-106	10MF	25V	ELECTRO	
	C533	QETB1EM-106	10MF	25V	ELECTRO	
	C534	QETB1EM-106	10MF	25V	ELECTRO	
	C551	QETB1HM-475	4.7MF	50V	ELECTRO	
	C552	QETB1HM-475	4.7MF	50V	ELECTRO	
	C553	QFN81HK-333	0.033MF	50V	MYLAR	
	C554	QCY21HK-472	4700PF	50V	CERAMIC	
	C555	QCS21HJ-271	270PF	50V	CERAMIC	
	C556	QCF21HP-223	0.022MF	50V	CERAMIC	
	C557	QCF21HP-223	0.022MF	50V	CERAMIC	
	C558	QETB1EM-106	10MF	25V	ELECTRO	
	C559	QETB1EM-106	10MF	25V	ELECTRO	
	C891	QCF21HP-472	4700PF	50V	CERAMIC	
	C892	QETB1EM-107	100MF	25V	ELECTRO	

Resistors

⚠	ITEM	PART NUMBER	DESCRIPTION			AREA
	R339	QRD161J-471	470	1/6W	CARBON	
	R340	QRD161J-471	470	1/6W	CARBON	
⚠	R343	QRD145J-680S	68	1/4W	UNF.CARBON	G
⚠	R343	QRZ0062-680	68	1/4W	FUSIBLE	H
⚠	R343	QRZ0062-680	68	1/4W	FUSIBLE	I
⚠	R344	QRD145J-680S	68	1/4W	UNF.CARBON	G
⚠	R344	QRZ0062-680	68	1/4W	FUSIBLE	H
⚠	R344	QRZ0062-680	68	1/4W	FUSIBLE	I
⚠	R345	QRD145J-680S	68	1/4W	UNF.CARBON	G
⚠	R345	QRZ0062-680	68	1/4W	FUSIBLE	H
⚠	R345	QRZ0062-680	68	1/4W	FUSIBLE	I
⚠	R346	QRD145J-680S	68	1/4W	UNF.CARBON	G
⚠	R346	QRZ0062-680	68	1/4W	FUSIBLE	H
⚠	R346	QRZ0062-680	68	1/4W	FUSIBLE	I
	R351	QRD161J-750	75	1/6W	CARBON	
	R352	QRD161J-750	75	1/6W	CARBON	
	R353	QRD161J-750	75	1/6W	CARBON	
	R354	QRD161J-750	75	1/6W	CARBON	
	R355	QRD161J-750	75	1/6W	CARBON	
	R356	QRD161J-821	820	1/6W	CARBON	
	R357	QRD161J-101	100	1/6W	CARBON	
	R358	QRD161J-102	1K	1/6W	CARBON	
	R359	QRD161J-100	10	1/6W	CARBON	
	R361	QRD161J-151	150	1/6W	CARBON	
	R362	QRD161J-331	330	1/6W	CARBON	
	R363	QRD161J-331	330	1/6W	CARBON	
	R364	QRD161J-680	68	1/6W	CARBON	
	R365	QRD161J-680	68	1/6W	CARBON	
	R366	QRD161J-750	75	1/6W	CARBON	
	R367	QRD161J-182	1.8K	1/6W	CARBON	
	R368	QRD161J-563	56K	1/6W	CARBON	
	R369	QRD161J-563	56K	1/6W	CARBON	
	R371	QRD161J-103	10K	1/6W	CARBON	
	R372	QRD161J-103	10K	1/6W	CARBON	
	R373	QRD161J-102	1K	1/6W	CARBON	
⚠	R375	QRD145J-220S	22	1/4W	UNF.CARBON	G
⚠	R375	QRZ0062-220	22	1/4W	FUSIBLE	H
⚠	R375	QRZ0062-220	22	1/4W	FUSIBLE	I
	R376	QRD161J-104	100K	1/6W	CARBON	
	R381	QRD161J-104	100K	1/6W	CARBON	
	R382	QRD161J-104	100K	1/6W	CARBON	
	R383	QRD161J-105	1M	1/6W	CARBON	
	R384	QRD161J-105	1M	1/6W	CARBON	
	R385	QRD161J-563	56K	1/6W	CARBON	
	R386	QRD161J-563	56K	1/6W	CARBON	
	R387	QRD161J-563	56K	1/6W	CARBON	
	R388	QRD161J-563	56K	1/6W	CARBON	
	R389	QRD161J-103	10K	1/6W	CARBON	
	R390	QRD161J-103	10K	1/6W	CARBON	
	R391	QRD161J-105	1M	1/6W	CARBON	
	R392	QRD161J-105	1M	1/6W	CARBON	
	R393	QRD161J-103	10K	1/6W	CARBON	
	R394	QRD161J-103	10K	1/6W	CARBON	
⚠	R395	QRD145J-680S	68	1/4W	UNF.CARBON	G
⚠	R395	QRZ0062-680	68	1/4W	FUSIBLE	H
⚠	R395	QRZ0062-680	68	1/4W	FUSIBLE	I
⚠	R396	QRD145J-680S	68	1/4W	UNF.CARBON	G
⚠	R396	QRZ0062-680	68	1/4W	FUSIBLE	H
⚠	R396	QRZ0062-680	68	1/4W	FUSIBLE	I
	R501	QRD161J-273	27K	1/6W	CARBON	
	R502	QRD161J-273	27K	1/6W	CARBON	
	R503	QRD161J-393	39K	1/6W	CARBON	
	R504	QRD161J-393	39K	1/6W	CARBON	
	R505	QRD161J-823	82K	1/6W	CARBON	
	R506	QRD161J-823	82K	1/6W	CARBON	
	R507	QRD161J-104	100K	1/6W	CARBON	
	R508	QRD161J-104	100K	1/6W	CARBON	
	R509	QRD161J-224	220K	1/6W	CARBON	
	R510	QRD161J-224	220K	1/6W	CARBON	
	R511	QRD161J-224	220K	1/6W	CARBON	
	R512	QRD161J-224	220K	1/6W	CARBON	
⚠	R521	QRD145J-680S	68	1/4W	UNF.CARBON	G
⚠	R521	QRZ0062-680	68	1/4W	FUSIBLE	H
⚠	R521	QRZ0062-680	68	1/4W	FUSIBLE	I
⚠	R522	QRD145J-680S	68	1/4W	UNF.CARBON	G
⚠	R522	QRZ0062-680	68	1/4W	FUSIBLE	H
⚠	R522	QRZ0062-680	68	1/4W	FUSIBLE	I
	R523	QRD161J-821	820	1/6W	CARBON	
	R524	QRD161J-821	820	1/6W	CARBON	
	R525	QRD161J-681	680	1/6W	CARBON	
	R526	QRD161J-272	2.7K	1/6W	CARBON	
	R531	QRD161J-102	1K	1/6W	CARBON	
	R532	QRD161J-102	1K	1/6W	CARBON	
	R533	QRD161J-823	82K	1/6W	CARBON	
	R534	QRD161J-823	82K	1/6W	CARBON	

⚠: Safety Parts

Resistors

⚠	ITEM	PART NUMBER	DESCRIPTION			AREA
	R535	QRD161J-124	120K	1/6W	CARBON	
	R536	QRD161J-124	120K	1/6W	CARBON	
	R537	QRD161J-474	470K	1/6W	CARBON	
	R538	QRD161J-474	470K	1/6W	CARBON	
	R551	QRD161J-563	56K	1/6W	CARBON	
	R552	QRD161J-563	56K	1/6W	CARBON	
	R553	QRD161J-563	56K	1/6W	CARBON	
	R554	QRD161J-563	56K	1/6W	CARBON	
	R555	QRD161J-223	22K	1/6W	CARBON	
	R556	QRD161J-273	27K	1/6W	CARBON	
	R558	QRD161J-474	470K	1/6W	CARBON	
	R559	QRD161J-223	22K	1/6W	CARBON	
	R561	QRD161J-104	100K	1/6W	CARBON	
	R562	QRD161J-154	150K	1/6W	CARBON	
	R563	QRD161J-394	390K	1/6W	CARBON	
	R564	QRD161J-474	470K	1/6W	CARBON	
	R565	QRD161J-333	33K	1/6W	CARBON	
	R566	QRD161J-683	68K	1/6W	CARBON	
	R567	QRD161J-273	27K	1/6W	CARBON	
⚠	R569	QRD145J-680S	68	1/4W	UNF.CARBON	G
⚠	R569	QRZ0062-680	68	1/4W	FUSIBLE	H
⚠	R569	QRZ0062-680	68	1/4W	FUSIBLE	I
⚠	R570	QRD145J-680S	68	1/4W	UNF.CARBON	G
⚠	R570	QRZ0062-680	68	1/4W	FUSIBLE	H
⚠	R570	QRZ0062-680	68	1/4W	FUSIBLE	I
	R571	QRD161J-474	470K	1/6W	CARBON	
	R572	QRD161J-474	470K	1/6W	CARBON	
⚠	R891	QRG022J-391A	390	2W	O.M.FILM	
⚠	R892	QRG022J-391A	390	2W	O.M.FILM	
⚠	R893	QRG022J-391A	390	2W	O.M.FILM	
⚠	R894	QRG022J-471A	470	2W	O.M.FILM	
⚠	R895	QRD125J-472	4.7K	1/2W	UNF.CARBON	
	RA501	QRB075J-474	470K	7W	ARRAY	
	RA502	QRB075J-474	470K	7W	ARRAY	

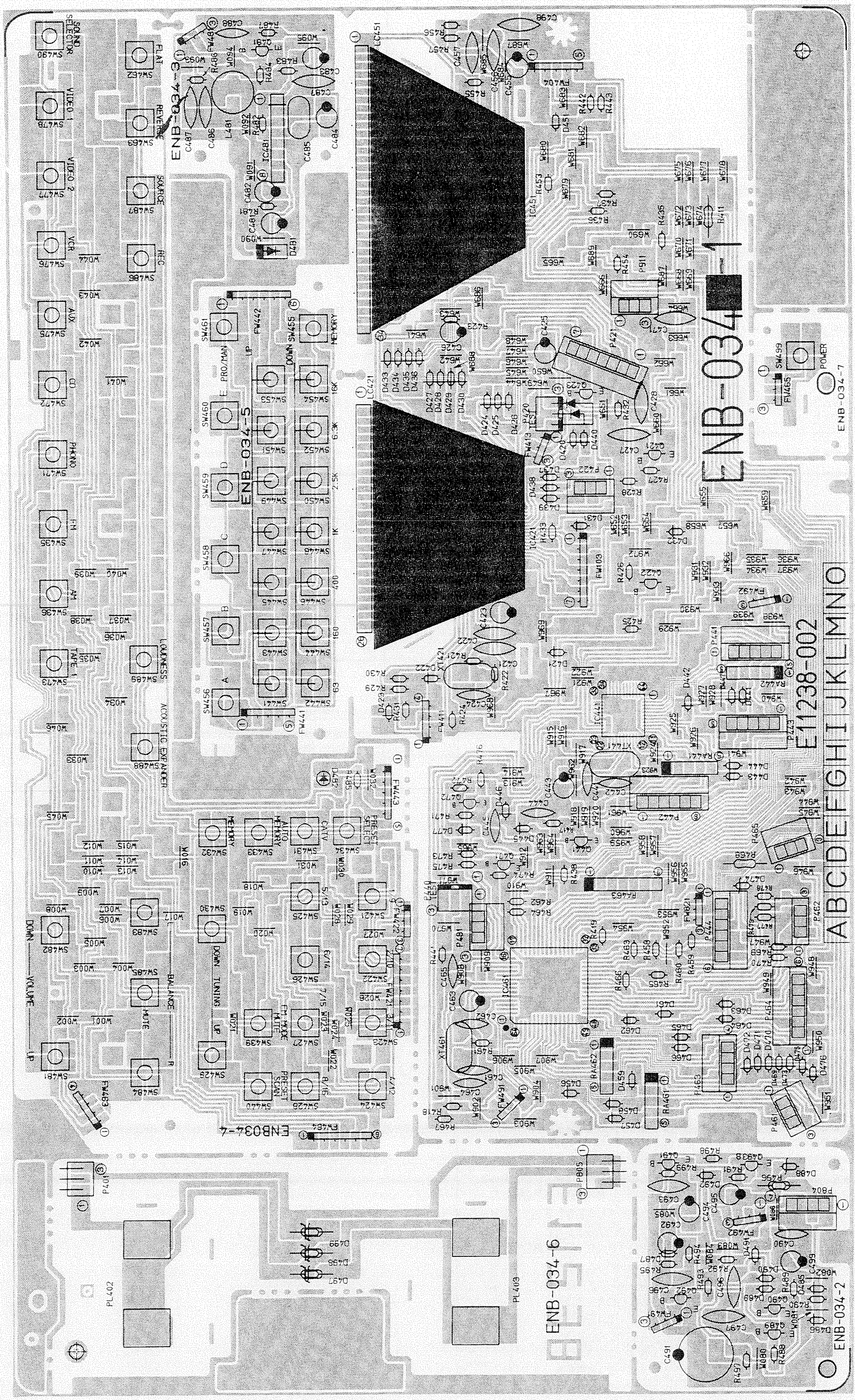
Others

⚠	ITEM	PART NUMBER	DESCRIPTION	AREA
	J302	EMN00TV-402A	PIN JACK ASSY	
	J303	EMN00TV-402A	PIN JACK ASSY	
	J304	EMN00TV-402A	PIN JACK ASSY	
	J301	EMN00TV-405A	PIN JACK ASSY	
	J306	EMN00TV-405A	PIN JACK ASSY	
	J305	EMN00TV-602A	PIN JACK ASSY	
		ENH-060F	CIRCUIT BOARD ASSY	G
		ENH-060F	CIRCUIT BOARD ASSY	H
		ENH-060G	CIRCUIT BOARD ASSY	I
		E11264-002	CIRCUIT BOARD ASSY	
		E69826-H22B	HEAT SINK	
		SBSB3012Z	SCREW	
	P702	EMV7112-003	SOCKET WIRE	
	P803	EMV7112-007	SOCKET WIRE	

⚠: Safety Parts

■ENB-034□ LCD P.C. Board Ass'y

Note: ENB-034□ varies according to the areas employed. See note (1) when placing an order.


ENB-034■-1
E11238-002
ABCDEFGHIJKLMNO
ENB-034-3
ENB-034-5
ENB034-4
ENB-034-6
ENB-034-2
ENB-034-7
SOUND SELECTOR
VIDEO 1
VIDEO 2
VCR
AUX
CD
PHONO
FM
AM
TAPE 1
FLAT
REVERSE
SOURCE
REC
LOUDNESS
ACOUSTIC EXPANDER
MEMORY
PRO/MAN
POWER
VOLUME
DOWN
UP
BALANCE
MUTE
TUNING
PRESET SELECT
AUTO MEMORY
CATV
IC421
IC451
IC481
IC461
PL402
PL403
P401

Note (1)

P.C. Board Ass'y	Designated Areas
ENB-034 A	U.S.A.
ENB-034 B	Canada
ENB-034 C	U.S. Military Market & Other Countries
ENB-034 D	Europe, Australia
ENB-034 E	West Germany
ENB-034 F	Europe & U.K. with LW

Transistors

⚠	ITEM	PART NUMBER	DESCRIPTION	MAKER	AREA
	Q421	2SC458(C,D)	SILICON	HITACHI	
	Q422	2SC458(C,D)	SILICON	HITACHI	
	Q423	DTC144EN	SILICON	ROHM	
	Q424	2SC1685(Q,R)	SILICON	MATSUSHITA	
	Q441	DTC144EN	SILICON	ROHM	
	Q471	2SC458(C,D)	SILICON	HITACHI	
	Q472	2SC458(C,D)	SILICON	HITACHI	
	Q481	2SC458(C,D)	SILICON	HITACHI	
	Q491	2SC458(C,D)	SILICON	HITACHI	
	Q492	2SC458(C,D)	SILICON	HITACHI	
	Q493	DTC144EN	SILICON	ROHM	

I.C.S.

⚠	ITEM	PART NUMBER	DESCRIPTION	MAKER	AREA
	IC421	LC5813H-246	I.C.	SANYO	
	IC441	UPD7507HG-507	I.C.	NEC	
	IC451	UPD7225G00	I.C.	NEC	
	IC461	MN1758JSI	I.C.	MATSUSHITA	
	IC481	UPC1473HA	I.C.	NEC	

Diodes

⚠	ITEM	PART NUMBER	DESCRIPTION	MAKER	AREA
	D420	1SS133	SILICON	ROHM	
	D421	1SS133	SILICON	ROHM	
	D422	1SS133	SILICON	ROHM	
	D423	1SS133	SILICON	ROHM	
	D424	1SS133	SILICON	ROHM	
	D425	1SS133	SILICON	ROHM	
	D426	1SS133	SILICON	ROHM	
	D427	1SS133	SILICON	ROHM	A
	D427	1SS133	SILICON	ROHM	B
	D428	1SS133	SILICON	ROHM	C
	D428	1SS133	SILICON	ROHM	D
	D428	1SS133	SILICON	ROHM	E
	D428	1SS133	SILICON	ROHM	F
	D429	1SS133	SILICON	ROHM	C
	D429	1SS133	SILICON	ROHM	D
	D429	1SS133	SILICON	ROHM	E
	D429	1SS133	SILICON	ROHM	F
	D430	1SS133	SILICON	ROHM	F
	D431	1SS133	SILICON	ROHM	
	D432	1SS133	SILICON	ROHM	
	D433	1SS133	SILICON	ROHM	
	D434	1SS133	SILICON	ROHM	
	D435	1SS133	SILICON	ROHM	
	D436	1SS133	SILICON	ROHM	
	D437	1SS133	SILICON	ROHM	
	D438	1SS133	SILICON	ROHM	
	D439	1SS133	SILICON	ROHM	
	D441	1SS133	SILICON	ROHM	
	D442	1SS133	SILICON	ROHM	
	D443	1SS133	SILICON	ROHM	

Diodes

⚠	ITEM	PART NUMBER	DESCRIPTION	MAKER	AREA
	D444	1SS133	SILICON	ROHM	
	D445	1SS133	SILICON	ROHM	
	D446	1SS133	SILICON	ROHM	
	D447	1SS133	SILICON	ROHM	
	D451	1SS133	SILICON	ROHM	
	D456	1SS133	SILICON	ROHM	
	D457	1SS133	SILICON	ROHM	
	D458	1SS133	SILICON	ROHM	
	D459	1SS133	SILICON	ROHM	
	D461	1SS133	SILICON	ROHM	
	D462	1SS133	SILICON	ROHM	
	D463	1SS133	SILICON	ROHM	
	D464	1SS133	SILICON	ROHM	
	D465	1SS133	SILICON	ROHM	
	D474	MTZ5.1B	ZENER		
	D477	1SS133	SILICON	ROHM	
	D478	1SS133	SILICON	ROHM	
	D481	PD49PI	SILICON		
	D482	SLH-34VC3F	L.E.D.	ROHM	
	D485	1SS133	SILICON	ROHM	
	D486	1SS133	SILICON	ROHM	
	D487	1SS133	SILICON	ROHM	
	D488	MTZ5.6C	ZENER	ROHM	
	D492	1SS133	SILICON	ROHM	
	D497	MTZ12C	ZENER	ROHM	A
	D497	MTZ12C	ZENER	ROHM	B
	D497	MTZ12C	ZENER	ROHM	C
	D497	RD13EB3	ZENER	NEC	D
	D497	RD13EB3	ZENER	NEC	E
	D497	RD13EB3	ZENER	NEC	F
	D498	MTZ12C	ZENER	ROHM	A
	D498	MTZ12C	ZENER	ROHM	B
	D498	MTZ12C	ZENER	ROHM	C
	D498	RD13EB3	ZENER	NEC	D
	D498	RD13EB3	ZENER	NEC	E
	D498	RD13EB3	ZENER	NEC	F
	D499	MTZ12C	ZENER	ROHM	A
	D499	MTZ12C	ZENER	ROHM	B
	D499	MTZ12C	ZENER	ROHM	C
	D499	RD13EB3	ZENER	NEC	D
	D499	RD13EB3	ZENER	NEC	E
	D499	RD13EB3	ZENER	NEC	F

Capacitors

⚠	ITEM	PART NUMBER	DESCRIPTION			AREA
	C421	QCS21HJ-331	330PF	50V	CERAMIC	
	C422	QCS21HJ-331	330PF	50V	CERAMIC	
	C423	QETB1AM-107	100MF	10V	ELECTRO	
	C424	QCF21HP-223	0.022MF	50V	CERAMIC	
	C425	QETB1HM-475	4.7MF	50V	ELECTRO	
	C426	QETB1HM-474	0.47MF	50V	ELECTRO	
	C427	QCY21HK-332	3300PF	50V	CERAMIC	
	C440	QETB0JM-477	470MF	6.3V	ELECTRO	
	C441	QCS21HJ-330	33PF	50V	CERAMIC	
	C442	QCS21HJ-330	33PF	50V	CERAMIC	
	C443	QETB1AM-227	220MF	10V	ELECTRO	
	C444	QCF21HP-223	0.022MF	50V	CERAMIC	
	C455	QETB1EM-106	10MF	25V	ELECTRO	
	C456	QCF21HP-223	0.022MF	50V	CERAMIC	
	C457	QCF21HP-223	0.022MF	50V	CERAMIC	
	C461	QCS21HJ-330	33PF	50V	CERAMIC	
	C462	QCS21HJ-330	33PF	50V	CERAMIC	
	C463	QETB1AM-477	470MF	10V	ELECTRO	
	C464	QCF21HP-223	0.022MF	50V	CERAMIC	
	C481	QETB1EM-106	10MF	25V	ELECTRO	
	C482	QETB1EM-476	47MF	25V	ELECTRO	
	C483	QETB1HM-475	4.7MF	50V	ELECTRO	
	C484	QETB1EM-106	10MF	25V	ELECTRO	
	C485	QFN81HK-333	0.033MF	50V	MYLAR	
	C486	QCY21HK-332	3300PF	50V	CERAMIC	
	C491	EEZ0502-479	47MF		ELECTRO	
	C492	QETB1HM-225	2.2MF	50V	ELECTRO	
	C493	QCF21HP-223	0.022MF	50V	CERAMIC	
	C494	QETB1AM-476	47MF	10V	ELECTRO	
	C495	QETB1HM-225	2.2MF	50V	ELECTRO	

Resistors

⚠	ITEM	PART NUMBER	DESCRIPTION			AREA
	R417	QRD161J-104	100K	1/6W	CARBON	
	R419	QRD161J-104	100K	1/6W	CARBON	
	R421	QRD161J-105	1M	1/6W	CARBON	
	R422	QRD161J-222	2.2K	1/6W	CARBON	
	R423	QRD161J-473	47K	1/6W	CARBON	
	R424	QRD161J-103	10K	1/6W	CARBON	
	R425	QRD161J-471	470	1/6W	CARBON	
	R426	QRD161J-103	10K	1/6W	CARBON	
	R427	QRD161J-473	47K	1/6W	CARBON	
	R428	QRD161J-223	22K	1/6W	CARBON	
	R429	QRD161J-104	100K	1/6W	CARBON	
	R430	QRD161J-104	100K	1/6W	CARBON	
	R431	QRD161J-104	100K	1/6W	CARBON	
	R434	QRD161-105	1M	1/6W	CARBON	
	R435	QRD161J-104	100K	1/6W	CARBON	
	R436	QRD161J-104	100K	1/6W	CARBON	
	R437	QRD161J-104	100K	1/6W	CARBON	
	R438	QRD161J-104	100K	1/6W	CARBON	
	R441	QRD161J-102	1K	1/6W	CARBON	
	R453	QRD161J-104	100K	1/6W	CARBON	
	R454	QRD161J-474	470K	1/6W	CARBON	
	R455	QRD161J-184	180K	1/6W	CARBON	
	R456	QRD161J-102	1K	1/6W	CARBON	
	R457	QRD161J-102	1K	1/6W	CARBON	
	R458	QRD161J-474	470K	1/6W	CARBON	
	R459	QRD161J-474	470K	1/6W	CARBON	
	R460	QRD161J-474	470K	1/6W	CARBON	
	R461	QRD161J-104	100K	1/6W	CARBON	
	R462	QRD161J-473	47K	1/6W	CARBON	
	R463	QRD161J-473	47K	1/6W	CARBON	
	R464	QRD161J-473	47K	1/6W	CARBON	
	R465	QRD161J-473	47K	1/6W	CARBON	
	R466	QRD161J-473	47K	1/6W	CARBON	
	R467	QRD161J-102	1K	1/6W	CARBON	
⚠	R468	QRD145J-681S	680	1/4W	UNF.CARBON	
	R469	QRD161J-474	470K	1/6W	CARBON	
	R470	QRD161J-474	470K	1/6W	CARBON	
	R471	QRD161J-473	47K	1/6W	CARBON	
	R472	QRD161J-473	47K	1/6W	CARBON	
	R473	QRD161J-471	470	1/6W	CARBON	
	R474	QRD161J-473	47K	1/6W	CARBON	
	R475	QRD161J-473	47K	1/6W	CARBON	
	R476	QRD161J-103	10K	1/6W	CARBON	
	R477	QRD161J-474	470K	1/6W	CARBON	
	R478	QRD161J-474	470K	1/6W	CARBON	
	R479	QRD161J-474	470K	1/6W	CARBON	
	R481	QRD161J-102	1K	1/6W	CARBON	
	R482	QRD161J-220	22	1/6W	CARBON	
	R483	QRD161J-104	100K	1/6W	CARBON	
	R484	QRD161J-104	100K	1/6W	CARBON	
	R485	QRD161J-221	220	1/6W	CARBON	
	R487	QRD161J-223	22K	1/6W	CARBON	
	R491	QRD161J-472	4.7K	1/6W	CARBON	
	R492	QRD161J-102	1K	1/6W	CARBON	
	R493	QRD161J-472	4.7K	1/6W	CARBON	
	R494	QRD161J-223	22K	1/6W	CARBON	
	R495	QRD161J-473	47K	1/6W	CARBON	
⚠	R496	QRD145J-222S	2.2K	1/4W	UNF.CARBON	D
⚠	R496	QRD145J-222S	2.2K	1/4W	UNF.CARBON	E
⚠	R496	QRD145J-222S	2.2K	1/4W	UNF.CARBON	F
	R496	QRD161J-222	2.2K	1/6W	CARBON	A
	R496	QRD161J-222	2.2K	1/6W	CARBON	B
	R496	QRD161J-222	2.2K	1/6W	CARBON	C
	R497	QRD161J-331	330	1/6W	CARBON	
	R498	QRD161J-103	10K	1/6W	CARBON	
	R499	QRD161J-223	22K	1/6W	CARBON	
	RA441	QRB045J-104	100K	4W	ARRAY	
	RA442	QRB045J-104	100K	4W	ARRAY	
	RA461	QRB045J-103	10K	4W	ARRAY	
	RA462	QRB045J-473	47K	4W	ARRAY	
	RA463	QRB065J-473	47K	6W	ARRAY	

⚠ : Safety Parts

Others

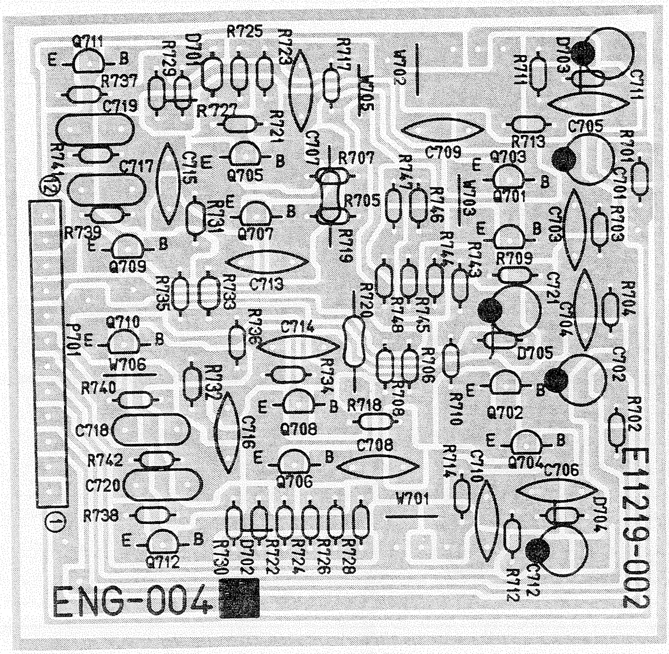
⚠	ITEM	PART NUMBER	DESCRIPTION	AREA
		E11238-002	CIRCUIT BOARD	
		E45524-002	FUSE CLIP	
		E48269-001	SPACER	D
		E48269-001	SPACER	E
		E48269-001	SPACER	F

Others

⚠	ITEM	PART NUMBER	DESCRIPTION	AREA
		E71504-001	SHIELD COVER	
	L481	EQL2103-562	INDUCTOR	
	P401	QMV5004-003K	PULAG ASSY	
	P420	QMV5005-003K	PULAG ASSY	
	P421	EMV7112-007	SOCKET WIRE	
	P422	EMV7112-003	SOCKET WIRE	
	P440	QMV5005-003K	PULAG ASSY	
	P441	EMV7112-005	SOCKET WIRE	
	P442	EMV7112-006	SOCKET WIRE	
	P443	EMV7112-005	SOCKET WIRE	
	P444	EMV7112-006	SOCKET WIRE	
	P461	EMV7112-003	SOCKET WIRE	
	P462	EMV7112-003	SOCKET WIRE	
	P463	EMV7112-004	SOCKET WIRE	
	P464	EMV7112-006	SOCKET WIRE	
	P465	EMV7112-003	SOCKET WIRE	
	P481	EMV7112-003	SOCKET WIRE	
	P804	EMV7112-004	SOCKET WIRE	
	P805	QMV5004-003K	PULAG ASSY	
	P911	EMV7112-003	SOCKET WIRE	
	LC421	ELU0002-012	LCD PANEL	
	LC451	ELU0002-013	LCD PANEL	
	SW421	ESP0001-007	PUSH SWITCH	
	SW422	ESP0001-007	PUSH SWITCH	
	SW423	ESP0001-007	PUSH SWITCH	
	SW424	ESP0001-007	PUSH SWITCH	
	SW425	ESP0001-007	PUSH SWITCH	
	SW426	ESP0001-007	PUSH SWITCH	
	SW427	ESP0001-007	PUSH SWITCH	
	SW428	ESP0001-007	PUSH SWITCH	
	SW429	ESP0001-007	PUSH SWITCH	
	SW430	ESP0001-007	PUSH SWITCH	
	SW431	ESP0001-007	PUSH SWITCH	A
	SW431	ESP0001-007	PUSH SWITCH	B
	SW432	ESP0001-007	PUSH SWITCH	
	SW433	ESP0001-007	PUSH SWITCH	
	SW434	ESP0001-007	PUSH SWITCH	
	SW435	ESP0001-007	PUSH SWITCH	
	SW436	ESP0001-007	PUSH SWITCH	
	SW439	ESP0001-007	PUSH SWITCH	
	SW440	ESP0001-007	PUSH SWITCH	
	SW441	ESP0001-007	PUSH SWITCH	
	SW442	ESP0001-007	PUSH SWITCH	
	SW443	ESP0001-007	PUSH SWITCH	
	SW444	ESP0001-007	PUSH SWITCH	
	SW445	ESP0001-007	PUSH SWITCH	
	SW446	ESP0001-007	PUSH SWITCH	
	SW447	ESP0001-007	PUSH SWITCH	
	SW448	ESP0001-007	PUSH SWITCH	
	SW449	ESP0001-007	PUSH SWITCH	
	SW450	ESP0001-007	PUSH SWITCH	
	SW451	ESP0001-007	PUSH SWITCH	
	SW452	ESP0001-007	PUSH SWITCH	
	SW453	ESP0001-007	PUSH SWITCH	
	SW454	ESP0001-007	PUSH SWITCH	
	SW455	ESP0001-007	PUSH SWITCH	
	SW456	ESP0001-007	PUSH SWITCH	
	SW457	ESP0001-007	PUSH SWITCH	
	SW458	ESP0001-007	PUSH SWITCH	
	SW459	ESP0001-007	PUSH SWITCH	
	SW460	ESP0001-007	PUSH SWITCH	
	SW461	ESP0001-007	PUSH SWITCH	
	SW462	ESP0001-007	PUSH SWITCH	
	SW463	ESP0001-007	PUSH SWITCH	
	SW471	ESP0001-007	PUSH SWITCH	
	SW472	ESP0001-007	PUSH SWITCH	
	SW473	ESP0001-007	PUSH SWITCH	
	SW476	ESP0001-007	PUSH SWITCH	
	SW477	ESP0001-007	PUSH SWITCH	
	SW478	ESP0001-007	PUSH SWITCH	
	SW481	ESP0001-007	PUSH SWITCH	
	SW482	ESP0001-007	PUSH SWITCH	
	SW483	ESP0001-007	PUSH SWITCH	
	SW484	ESP0001-007	PUSH SWITCH	
	SW485	ESP0001-007	PUSH SWITCH	
	SW486	ESP0001-007	PUSH SWITCH	
	SW487	ESP0001-007	PUSH SWITCH	
	SW488	ESP0001-007	PUSH SWITCH	
	SW489	ESP0001-007	PUSH SWITCH	
	SW490	ESP0001-007	PUSH SWITCH	
	SW499	ESP0001-007	PUSH SWITCH	
	XT421	ECX0000-400KS	RESONATOR	
	XT441	ECX0004-190KU	RESONATOR	
	XT461	ECX0007-200KM	RESONATOR	

■ENG-004☐ Pre-Driver P.C. Board Ass'y

Note: ENG-004☐ varies according to the areas employed. See note (1) when placing an order.


Q711
E
B
R737
C719
R729
D701
R725
R723
R727
R721
R717
W705
W702
D703
R711
C711
R741
⑫
C717
C715
E
B
Q705
C707
R707
R747
C709
C705
R713
E
Q703
R701
C701
R703
Q707
B
R705
R731
R746
W703
Q701
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C703
R739
E
B
Q709
R719
R744
R743
E
R709
R720
C721
R704
R735
R733
C713
R748
R745
Q710
E
B
P701
R736
C714
C704
W706
R740
R732
R734
R706
D705
C702
E
B
R718
R708
R710
R702
C718
C716
Q708
E
Q702
E
B
R742
C708
R714
C710
Q704
C706
C720
E
Q706
B
W701
D704
①
R738
E
B
Q712
R730
D702
R722
R724
R726
R728
C712
R712
E11219-002
ENG-004

Note (1)

P.C. Board Ass'y	Designated Areas
ENG-004 G	U.S.A., Canada, U.S. Military Market & Other Countries
ENG-004 H	Europe, Australia, U.K.
ENG-004 I	West Germany

Transistors

⚠	ITEM	PART NUMBER	DESCRIPTION		AREA
				MAKER	
	Q701	2SC2240(A,B)	SILICON	TOSHIBA	
	Q702	2SC2240(A,B)	SILICON	TOSHIBA	
	Q703	2SC2240(A,B)	SILICON	TOSHIBA	
	Q704	2SC2240(A,B)	SILICON	TOSHIBA	
	Q705	2SA1038(S,E)	SILICON	ROHM	
	Q706	2SA1038(S,E)	SILICON	ROHM	
	Q707	2SA933LN(R,S)	SILICON	ROHM	
	Q708	2SA933LN(R,S)	SILICON	ROHM	
	Q709	2SA1038(S,E)	SILICON	ROHM	
	Q710	2SA1038(S,E)	SILICON	ROHM	
	Q711	2SC2389(S,E)	SILICON	ROHM	
	Q712	2SC2389(S,E)	SILICON	ROHM	

⚠	ITEM	PART NUMBER	DESCRIPTION		AREA
				MAKER	
	D701	1SS133	SILICON	ROHM	
	D702	1SS133	SILICON	ROHM	
	D703	1SS133	SILICON	ROHM	H
	D703	1SS133	SILICON	ROHM	I
	D704	1SS133	SILICON	ROHM	H
	D704	1SS133	SILICON	ROHM	I
	D705	MTZ22C	ZENER		

Capacitors

⚠	ITEM	PART NUMBER	DESCRIPTION			AREA
	C701	QETB1HM-475	4.7MF	50V	ELECTRO	
	C702	QETB1HM-475	4.7MF	50V	ELECTRO	
	C703	QCS21HJ-271	270PF	50V	CERAMIC	
	C704	QCS21HJ-271	270PF	50V	CERAMIC	
	C705	QCS21HJ-101	100PF	50V	CERAMIC	
	C706	QCS21HJ-101	100PF	50V	CERAMIC	
	C707	QCY21HK-332	3300PF	50V	CERAMIC	
	C708	QCY21HK-332	3300PF	50V	CERAMIC	
	C709	QCS21HJ-100	10PF	50V	CERAMIC	
	C710	QCS21HJ-100	10PF	50V	CERAMIC	
	C711	QETB1CM-476	47MF	16V	ELECTRO	
	C712	QETB1CM-476	47MF	16V	ELECTRO	
	C713	QCS21HJ-220	22PF	50V	CERAMIC	
	C714	QCS21HJ-220	22PF	50V	CERAMIC	
	C715	QCS21HJ-121	120PF	50V	CERAMIC	
	C716	QCS21HJ-121	120PF	50V	CERAMIC	
	C717	QFN81HJ-822	8200PF	50V	MYLAR	
	C718	QFN81HJ-822	8200PF	50V	MYLAR	
	C719	QFN81HJ-822	8200PF	50V	MYLAR	
	C720	QFN81HJ-822	8200PF	50V	MYLAR	
	C721	QETB1EM-106	10MF	25V	ELECTRO	

Resistors

⚠	ITEM	PART NUMBER	DESCRIPTION			AREA
	R701	QRD161J-222	2.2K	1/6W	CARBON	
	R702	QRD161J-222	2.2K	1/6W	CARBON	
	R703	QRD161J-104	100K	1/6W	CARBON	
	R704	QRD161J-104	100K	1/6W	CARBON	
	R705	QRD161J-202	2K	1/6W	CARBON	
	R706	QRD161J-202	2K	1/6W	CARBON	
	R707	QRD161J-202	2K	1/6W	CARBON	
	R708	QRD161J-202	2K	1/6W	CARBON	
	R709	QRD161J-103	10K	1/6W	CARBON	
	R710	QRD161J-103	10K	1/6W	CARBON	
	R711	QRD161J-202	2K	1/6W	CARBON	
	R712	QRD161J-202	2K	1/6W	CARBON	
	R713	QRD161J-104	100K	1/6W	CARBON	
	R714	QRD161J-104	100K	1/6W	CARBON	
	R717	QRD161J-101	100	1/6W	CARBON	
	R718	QRD161J-101	100	1/6W	CARBON	
⚠	R719	QRD145J-121S	120	1/4W	UNF.CARBON	
⚠	R720	QRD145J-121S	120	1/4W	UNF.CARBON	
	R723	QRD144J-472	4.7K	1/4W	CARBON	
	R724	QRD144J-472	4.7K	1/4W	CARBON	
	R727	QRD144J-472	4.7K	1/4W	CARBON	
	R728	QRD144J-472	4.7K	1/4W	CARBON	
	R729	QRD161J-391	390	1/6W	CARBON	
	R730	QRD161J-391	390	1/6W	CARBON	
	R731	QRD161J-152	1.5K	1/6W	CARBON	
	R732	QRD161J-152	1.5K	1/6W	CARBON	
	R733	QRD161J-152	1.5K	1/6W	CARBON	
	R734	QRD161J-152	1.5K	1/6W	CARBON	
	R735	QRD161J-333	33K	1/6W	CARBON	
	R736	QRD161J-333	33K	1/6W	CARBON	
	R737	QRD161J-391	390	1/6W	CARBON	
	R738	QRD161J-391	390	1/6W	CARBON	
	R739	QRD161J-682	6.8K	1/6W	CARBON	
	R740	QRD161J-682	6.8K	1/6W	CARBON	
	R741	QRD161J-682	6.8K	1/6W	CARBON	
	R742	QRD161J-682	6.8K	1/6W	CARBON	

⚠: Safety Parts

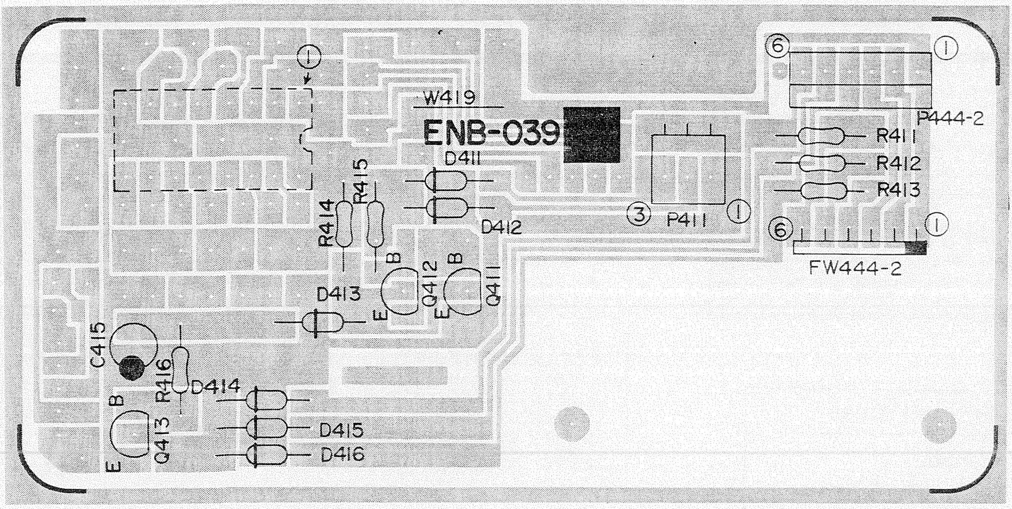
Resistors

⚠	ITEM	PART NUMBER	DESCRIPTION			AREA
	R743	QRD161J-511	510	1/6W	CARBON	
	R744	QRD161J-511	510	1/6W	CARBON	
	R745	QRD125J-182	1.8K	1/2W	CARBON	
	R747	QRD161J-511	510	1/6W	CARBON	
	R748	QRD161J-511	510	1/6W	CARBON	

Others

⚠	ITEM	PART NUMBER	DESCRIPTION	AREA
		E11219-002	CIRCUIT BOARD	
	P701	EMV5101-012B	PLUG ASSY	

■ENB-039 A Sub Control P.C. Board Ass'y



⚠	ITEM	PART NUMBER	DESCRIPTION		AREA
				MAKER	
	Q411	2SC1740LN(R,S)	SILICON	ROHM	
	Q412	2SC1740LN(R,S)	SILICON	ROHM	
	Q413	2SC1740LN(R,S)	SILICON	ROHM	

Resistors

⚠	ITEM	PART NUMBER	DESCRIPTION			AREA
	R411	QRD148J-471S	470	1/4W	CARBON	
	R412	QRD148J-471S	470	1/4W	CARBON	
	R413	QRD148J-471S	470	1/4W	CARBON	
	R414	QRD148J-223S	22K	1/4W	CARBON	
	R415	QRD148J-474S	470K	1/4W	CARBON	
	R416	QRD148J-473S	47K	1/4W	CARBON	

Diodes

⚠	ITEM	PART NUMBER	DESCRIPTION		AREA
				MAKER	
	D411	1S2473HX	SILICON	ROHM	
	D412	1S2473HX	SILICON	ROHM	
	D413	1S2473HX	SILICON	ROHM	
	D414	1S2473HX	SILICON	ROHM	
	D415	1S2473HX	SILICON	ROHM	
	D416	1S2473HX	SILICON	ROHM	

Others

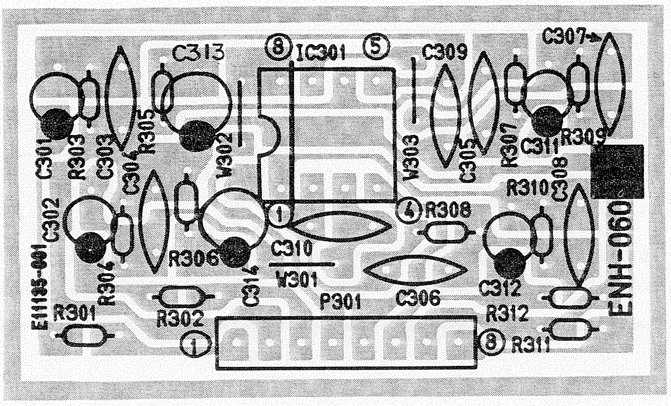
⚠	ITEM	PART NUMBER	DESCRIPTION	AREA
		E304243-001	CIRCUIT BOARD	
	P411	QMV5004-003K	PULAG ASSY	
	P444	EMV7112-006	SOCKET WIRE	

Capacitors

⚠	ITEM	PART NUMBER	DESCRIPTION			AREA
	C415	QETB1HM-474	0.47MF	50V	ELECTRO	

■ENH-060☐ Equalizer Module P.C. Board Ass'y

Note:ENH-060☐ varies according to the areas employed. See note (1) when placing an order.


C313
⑧
IC301
⑤
C309
C307
C301
R303
C303
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R305
W302
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C311
R309
R310
C308
①
④
R308
C302
R306
C310
W301
C314
R304
E11135-001
R301
R302
P301
C306
C312
R312
①
⑧
R311
ENH-060

Note (1)

P.C. Board Ass'y	Designated Areas
ENH-060 F	U.S.A., Canada, Europe, Australia, U.K., U.S. Military Market & Other Countries
ENH-060 G	West Germany

I.C.S.

⚠	ITEM	PART NUMBER	DESCRIPTION		AREA
				MAKER	
	IC301	NJM4558D-D	I.C.		

Capacitors

⚠	ITEM	PART NUMBER	DESCRIPTION			AREA
	C301	QETB1HM-475	4.7MF	50V	ELECTRO	
	C302	QETB1HM-475	4.7MF	50V	ELECTRO	
	C303	QCY21HK-101	100PF	50V	CERAMIC	F
	C303	QCY21HK-471	470PF	50V	CERAMIC	G
	C304	QCY21HK-101	100PF	50V	CERAMIC	F
	C304	QCY21H<-471	470PF	50V	CERAMIC	G
	C305	QCY21HK-182	1800PF	50V	CERAMIC	
	C306	QCY21HK-182	1800PF	50V	CERAMIC	
	C307	QCY21HK-682	6800PF	50V	CERAMIC	
	C308	QCY21HK-682	6800PF	50V	CERAMIC	
	C309	QCY21HK-101	100PF	50V	CERAMIC	
	C310	QCY21HK-101	100PF	50V	CERAMIC	
	C311	QETB1HM-475	4.7MF	50V	ELECTRO	
	C312	QETB1HM-475	4.7MF	50V	ELECTRO	
	C313	QETB1AM-476	47MF	10V	ELECTRO	
	C314	QETB1AM-476	47MF	10V	ELECTRO	

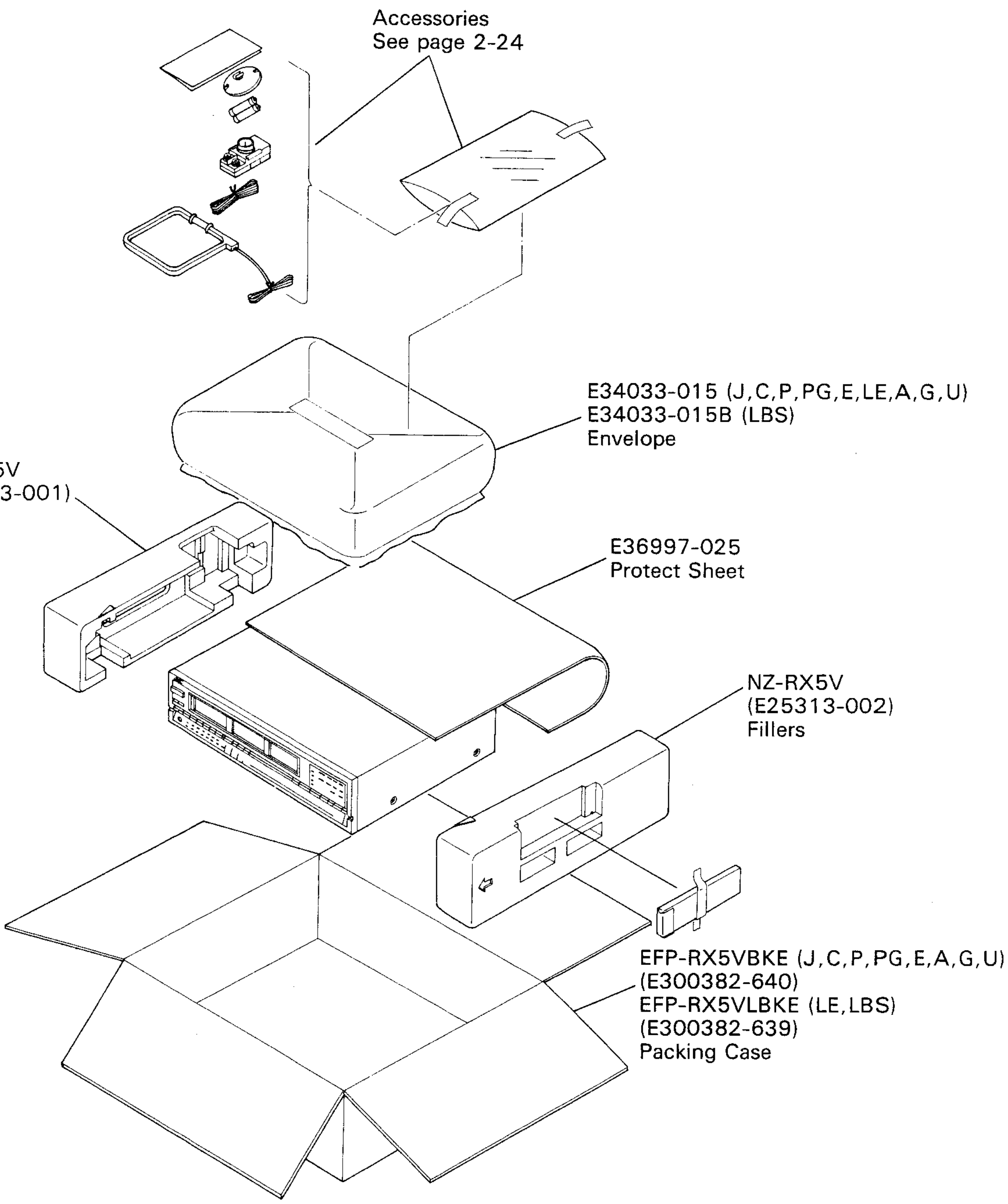
Resistors

⚠	ITEM	PART NUMBER	DESCRIPTION			AREA
	R301	QRD161J-222	2.2K	1/6W	CARBON	
	R302	QRD161J-222	2.2K	1/6W	CARBON	
	R303	QRD161J-473	47K	1/6W	CARBON	
	R304	QRD161J-473	47K	1/6W	CARBON	
	R305	QRD161J-561	560	1/6W	CARBON	
	R306	QRD161J-561	560	1/6W	CARBON	F
	R306	QRD161J-561	560	1/6W	CARBON	G
	R307	QRD161J-393	39K	1/6W	CARBON	
	R308	QRD161J-393	39K	1/6W	CARBON	
	R309	QRD161J-474	470K	1/6W	CARBON	
	R310	QRD161J-474	470K	1/6W	CARBON	
	R311	QRD161J-104	100K	1/6W	CARBON	
	R312	QRD161J-104	100K	1/6W	CARBON	

Others

⚠	ITEM	PART NUMBER	DESCRIPTION	AREA
		E11135-001	CIRCUIT BOARD	
	P301	EMV5101-008B	PLUG ASSY	

Packing Materials and Part Numbers


Accessories
See page 2-24
E34033-015 (J,C,P,PG,E,LE,A,G,U)
E34033-015B (LBS)
Envelope
NZ-RX5V
(E25313-001)
Fillers
E36997-025
Protect Sheet
NZ-RX5V
(E25313-002)
Fillers
EFP-RX5VBKE (J,C,P,PG,E,A,G,U)
(E300382-640)
EFP-RX5VLBKE (LE,LBS)
(E300382-639)
Packing Case

The Marks for Designated Areas

J	U.S.A.	E,LE	Europe	LBS	U.K.
C	Canada	G	West Germany	P, PG	U.S. Military Market
A	Australia			U	Other Countries

No mark indicates all areas.

Accessories List

⚠	Part Number	Part Name	Q'ty	Description	Areas
	E30580-1335A	Instruction Book	1		J, C, P, PG, E, LE, A, G, U
	E30580-1335ABS	Instruction Book	1		LBS
	BT20025H	Warranty Card	1		C
	BT20028B	Warranty Card	1		J, P, PG
	BT20029C	Warranty Card	1		A
	BT20064	Warranty Card	1		G
	BT20060	Warranty Card	1		LBS
	BT20071A	Service Center	1		J, C
	BT20046B	Service Information Card	1		J, P, PG
	BT20066	EEC Agency	1		G, LBS
	QZL1008-001	FTZ Information Sheet	1		G
	BT20044E	Safety Information Sheet	1		J
	E66416-003	Envelope	1	for Warranty Card	J
	EQB4001-012	AM Loop Antenna	1		
	E304084-001	Loop Stand	1		
	E73088-001	Bracket	1		
⚠	EMC0201-001BS	AC Plug	1		LBS
	EWP502-001	Built-in Antenna	1		J, C, P, PG, E, A, LE, LBS, U
	UM-3-2P	Battery	2		
	E41202-2	Envelope	1	for Instruction Book	J, C, P, PG, E, LE, A, G, U
	E41202-2B	Envelope	1	for Instruction Book	LBS
⚠	QMF51A2-5R0S	Fuse	1		PG, U
⚠	QMF51A2-2R5S	Fuse	1		P
	E6581-4	Envelope	1	for Fuse	P, PG, U
⚠	E04056	Siemens Plug	1		PG, U
	E35497-013	Caution Sheet	1	110 V	P
	E35497-015	Caution Sheet	1	220 V	PG, U
	RM-S9	Remote Control Unit	1		
	E67007-001	Wire Antenna Ass'y	1		G
	E43486-165A	Information Sheet	1		LBS
	E43486-238A	Sheet	1		
	E43486-245A	Sheet	1		C, P, PG, E, LE, A, GLBS, U
	E43486-246A	Sheet	1		C, P, PG, E, LE, A, G, LBS, U
	E43486-247A	Sheet	1		C, P, PG, E, LE, A, G, LBS, U

⚠ : Safety Parts

The Marks for Designated Areas

J . . . . U.S.A.
C . . . . Canada
A . . . . Australia
No mark indicates all areas.

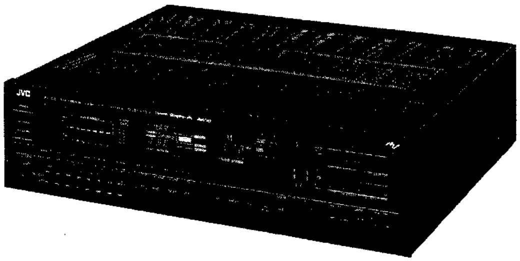
E, LE . . . . Europe
G . . . . West Germany

LBS . . . . U.K.
P, PG . . . . U.S. Military Market
U . . . . Other Countries

JVC Instruction Book

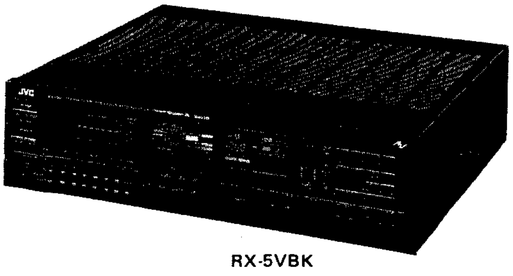
COMPUTER CONTROLLED RECEIVER

RX-5VBK/RX-5VLBK



RX-5VLBK

COMPU LINK
Remote
Control Component



RX-5VBK

For Customer Use:
Enter below the Model No. and Serial No. which is located either on the rear, bottom or side of the cabinet. Retain this information for future reference.

Model No. ____________________

Serial No. ____________________

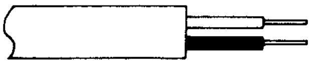
E30580-1304A

(No. 2904)

IMPORTANT (In the United Kingdom)
Mains Supply (AC 240 V∿, 50 Hz only)

IMPORTANT

Do not make any connection to the Larger Terminal coded E or Green. The wires in the mains lead are coloured in accordance with the following code:



If these colours do not correspond with the terminal identifications of your plug, connect as follows:
Blue wire to terminal coded N (Neutral) or coloured Black.
Brown wire to terminal coded L (Live) or coloured Red.
If in doubt — consult a competent electrician.

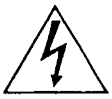
BEMAERK: I stilling OFF er apparatet stadig forbundet med lysnettet hvis det ønskes fuldstændig afbrudt skal netledningen trækkes ud.

WARNING: TO REDUCE THE RISK OF FIRE OR ELECTRIC SHOCK, DO NOT EXPOSE THIS APPLIANCE TO RAIN OR MOISTURE.

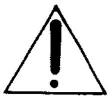
CAUTION

RISK OF ELECTRIC SHOCK
DO NOT OPEN

CAUTION: TO REDUCE THE RISK OF ELECTRIC SHOCK,
DO NOT REMOVE COVER (OR BACK).
NO USER-SERVICEABLE PARTS INSIDE.
REFER SERVICING TO QUALIFIED SERVICE PERSONNEL.



The lightning flash with arrowhead symbol, within an equilateral triangle, is intended to alert the user to the presence of uninsulated "dangerous voltage" within the product's enclosure that may be of sufficient magnitude to constitute a risk of electric shock to persons.



The exclamation point within an equilateral triangle is intended to alert the user to the presence of important operating and maintenance (servicing) instructions in the literature accompanying the appliance.

IMPORTANT (CANADA ONLY/CANADA SEULEMENT)

CAUTION: TO PREVENT ELECTRIC SHOCK DO NOT USE THIS (POLARIZED) PLUG WITH AN EXTENSION CORD, RECEPTACLE OR OTHER OUTLET UNLESS THE BLADES CAN BE FULLY INSERTED TO PREVENT BLADE EXPOSURE

ATTENTION: POUR PREVENIR LES CHOCS ELECTRIQUES NE PAS UTILISER CETTE FICHE POLARISEE AVEC UN PROLONGATEUR, UNE PRISE DE COURANT OU UNE AUTRE SORTIE DE COURANT, SAUF SI LES LAMES PEUVENT ETRE INSEREES A FOND SANS EN LAISSER AUCUNE PARTIE A DECOUVERT

"Note to CATV system installer: (U.S.A. ONLY)

This reminder is provided to call the CATV system installer's attention to Article 820-22 of the NEC that provides guidelines for proper grounding and, in particular, specifies that the cable ground shall be connected to the grounding system of the building, as close to the point of cable entry as practical."

COMPU LINK
//// Remote ////
Control System

COMPU LINK is a computer-linked system by which individual JVC audio and/or video components are controlled via a computer. For further details, see page 11.

CAUTION

To reduce the risk of electrical shocks, fire, etc.:

1. Do not remove screws, covers or cabinet.
2. Do not expose this appliance to rain or moisture.

Thank you for purchasing this JVC product.
Before you begin operating this unit, please read the instructions carefully to be sure you get the best possible performance.
If you have any questions, consult your JVC dealer.

CONTENTS

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COMPU LINK remote control system 11
Remote control unit (RM-S9) 11

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  Listening to broadcasts 14
  Listening to records 14
  Listening to tapes 14
  Watching and listening to VIDEO 1 (VIDEO 2) 14
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  Using stereo headphones 15
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IMPORTANT

1. Installation

- Select a place which is level, dry, and neither too hot nor too cold (between −5°C and 40°C/23°F and 104°F).
- Pay attention to good ventilation; putting things on the cabinet or using the receiver in a narrow and poorly ventilated place may result in the temperature rising and cause trouble.
- Leave a sufficient distance between the receiver and your TV to prevent interference noise.

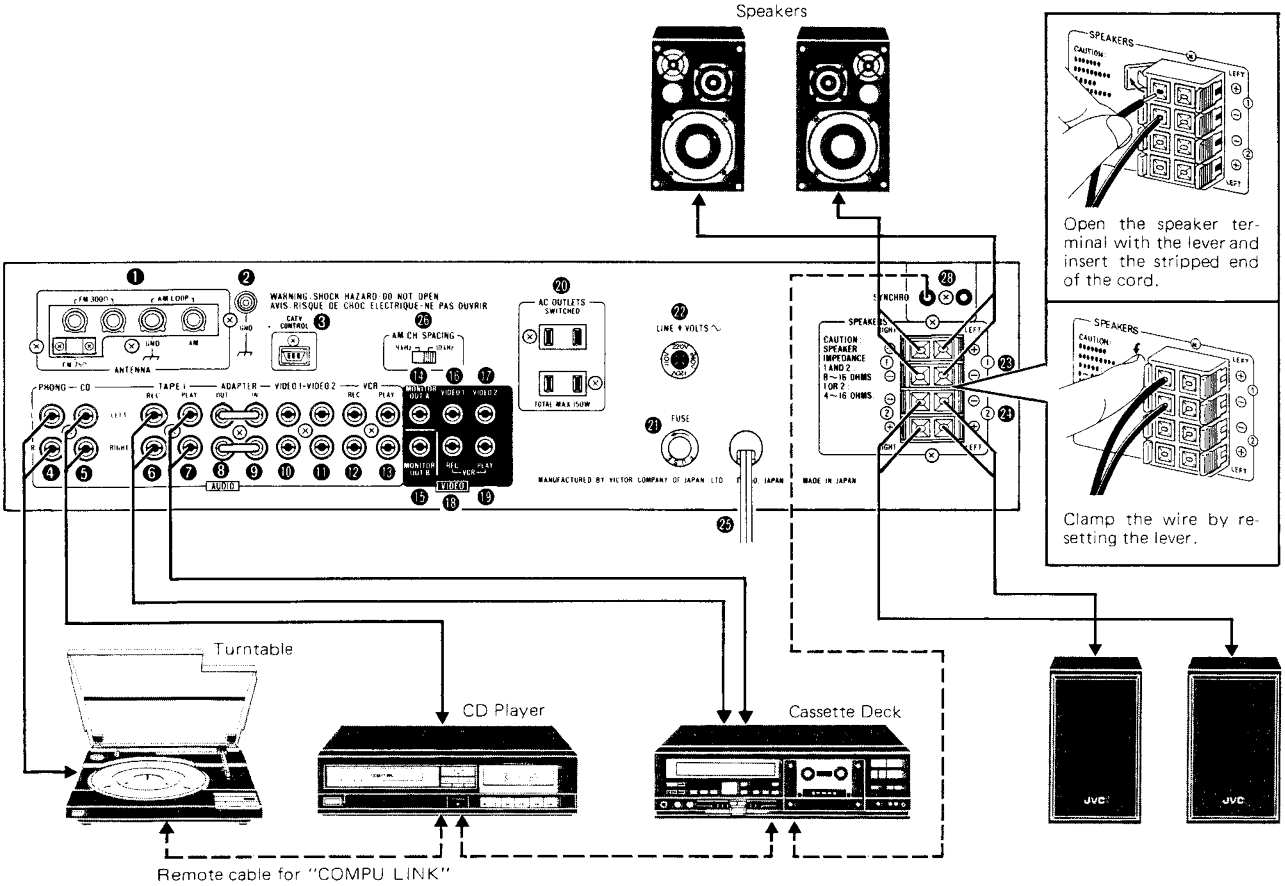
2. Power

- Do not handle the power cord with wet hands!
- When unplugging from the wall outlet, always grip the plug, not the power cord itself.

3. Malfunctions, etc.

- Do not insert any metallic object inside the receiver.

CONNECTION DIAGRAM

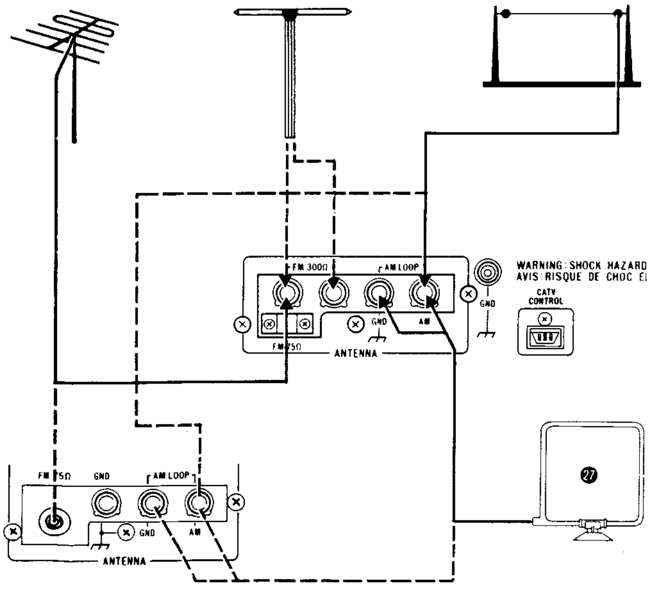

Speakers
①
②
FM 300Ω
AM LOOP
FM 75Ω
GND
AM
ANTENNA
WARNING: SHOCK HAZARD DO NOT OPEN
AVIS: RISQUE DE CHOC ELECTRIQUE-NE PAS OUVRIR
CATV CONTROL
③
㉖
AM CH SPACING
⑳
AC OUTLETS SWITCHED
TOTAL MAX 150W
㉒
LINE VOLTS
㉑
FUSE
PHONO
CD
TAPE 1
REC
PLAY
ADAPTER
OUT
IN
VIDEO 1
VIDEO 2
VCR
MONITOR OUT A
MONITOR OUT B
LEFT
RIGHT
④
⑤
⑥
⑦
⑧
⑨
⑩
⑪
⑫
⑬
⑭
⑮
⑯
⑰
⑱
⑲
AUDIO
VIDEO
MANUFACTURED BY VICTOR COMPANY OF JAPAN LTD
MADE IN JAPAN
㉕
㉘
SYNCHRO
SPEAKERS
CAUTION
SPEAKER IMPEDANCE
1 AND 2
8～16 OHMS
1 OR 2
4～16 OHMS
㉓
㉔
Turntable
CD Player
Cassette Deck
JVC

Open the speaker terminal with the lever and insert the stripped end of the cord.

Clamp the wire by resetting the lever.

Remote cable for "COMPU LINK"

Fig. 1


FM 300Ω
AM LOOP
FM 75Ω
GND
AM
ANTENNA
WARNING: SHOCK HAZARD
AVIS: RISQUE DE CHOC EL
CATV CONTROL
㉗

(For W. Germany)

Fig. 2

❶ External ANTENNA terminals
❷ GND terminal for AM (MW/LW) loop antenna, etc.
❸ CATV CONTROL terminal**
Connect the optional CATV antenna control unit. To connect, refer to the instruction book of the CATV antenna control unit.

AUDIO . . . For audio signal connection
❹ PHONO terminals
❺ CD terminals
❻ TAPE 1 REC terminals
❼ TAPE 1 PLAY terminals
❽ ADAPTER OUT terminals
❾ ADAPTER IN terminals
Use these terminals to connect an audio processing unit, another graphic equalizer, or a noise reduction unit.
❿ VIDEO 1 terminals
⓫ VIDEO 2 terminals
⓬ VCR REC terminals

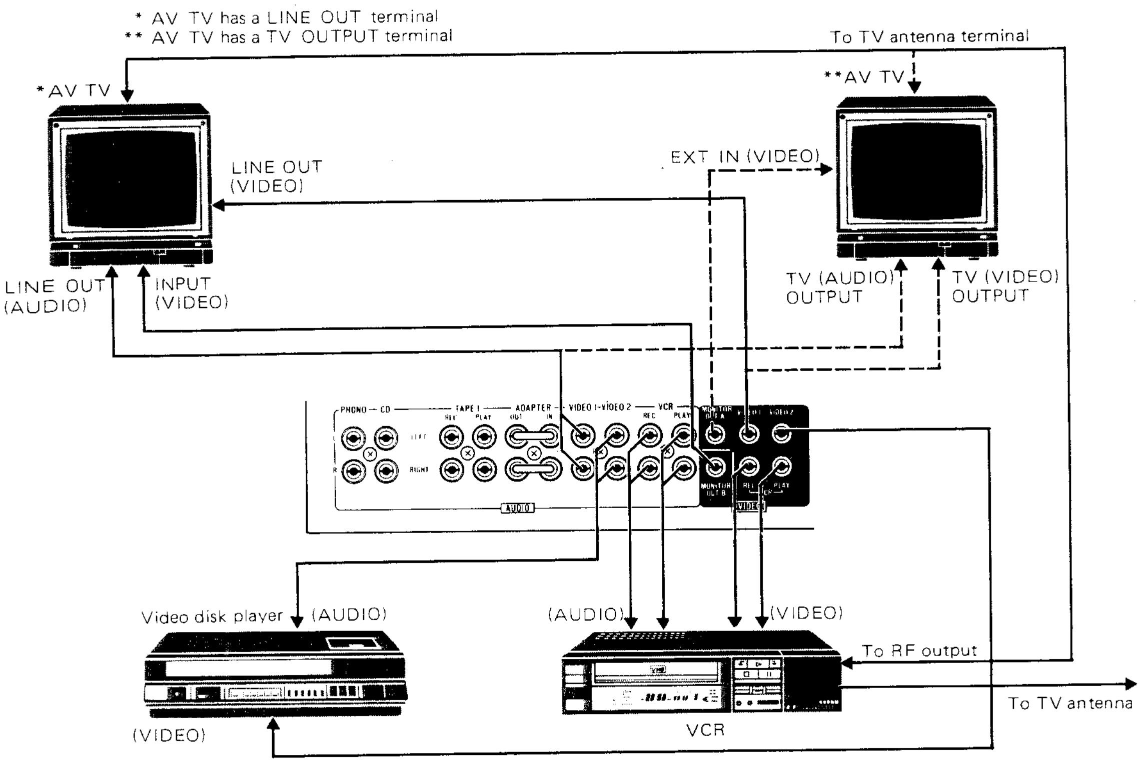

* AV TV has a LINE OUT terminal
** AV TV has a TV OUTPUT terminal
To TV antenna terminal
*AV TV
**AV TV
LINE OUT (VIDEO)
EXT IN (VIDEO)
LINE OUT (AUDIO)
INPUT (VIDEO)
TV (AUDIO) OUTPUT
TV (VIDEO) OUTPUT
Video disk player
(AUDIO)
(AUDIO)
(VIDEO)
To RF output
To TV antenna
(VIDEO)
VCR

Fig. 3

⑬ VCR PLAY terminals

Notes:

- **These VIDEO 1 and VIDEO 2 terminals can also be used to receive audio signals from audio equipment.**
- **The VCR terminals can also be used as TAPE terminals for an extra tape deck.**

VIDEO . . . For video signal connection

⑭ MONITOR OUT A terminal
Connect the VIDEO MONITOR OUT A terminal to an AV TV with a TV OUTPUT terminal or a television provided with a video input terminal, to reproduce video signals.

⑮ MONITOR OUT B terminal
Connect any of several JVC-specified TVs or an AV TV with a LINE OUT terminal. No signal is output from this terminal when the VIDEO 1 source is selected.

⑯ VIDEO 1 terminal
Connect any of several JVC-specified TVs, an AV TV with a LINE OUT terminal or an ordinary video unit.

⑰ VIDEO 2 terminal

⑱ VCR REC terminal

⑲ VCR PLAY terminal

GENERAL

⑳ AC OUTLETS (SWITCHED)

㉑ Fuse holder***

㉒ Voltage selector****
When this equipment is used in an area where the supply voltage is different from the preset voltage, reset the voltage selector to the correct position.

㉓ SPEAKERS 1 terminals

㉔ SPEAKERS 2 terminals

㉕ Power cord

㉖ AM channel spacing switch****
The AM channel spacing switch on the rear panel allows selection of 9 kHz or 10 kHz steps, depending on your area.

Band / Area	FM	AM (MW)	AM (LW)
U.S.A., Canada	100 kHz	10 kHz	–
Continental Europe, UK	50 kHz	9 kHz	1 kHz
Continental Europe, Australia	50 kHz	9 kHz	–
Other areas	50 kHz	*9 kHz 10 kHz	–

Note: *Preset at the factory.

Example

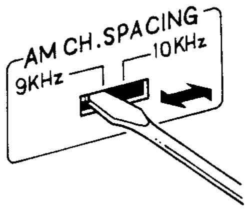

AM CH.SPACING
9KHz
10KHz

Fig. 4

Switch over using the tip of a screwdriver as shown in Fig. 4.

㉗ AM loop antenna

㉘ SYNCHRO terminals

Connect to units provided with a SYNCHRO terminal to let the COMPU LINK control system function.

** Provided only on units for the U.S.A. and Canada.

*** Not provided on units for the U.S.A., Canada, the U.K., and Australia.

**** Not provided on units for the U.S.A., Canada, Continental Europe, the U.K., and Australia.

Notes:

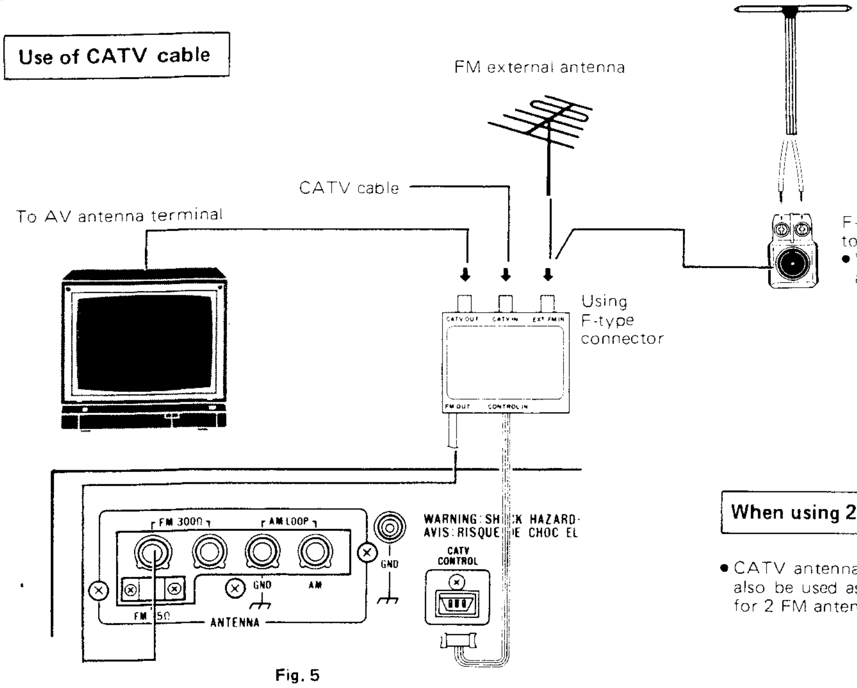
1. **When connecting the components, make the correct left and right channel connections. Reversed channels may degrade the stereo effect.**
2. **Connect speakers with correct polarity: (+) to (+) and (−) to (−). Reversed polarity may degrade the stereo effect.**
3. **Switch the power off when connecting any component.**
4. **Connect plugs or wires firmly. Poor contact may result in hum.**
5. **Use speakers with an impedance of 8 ohms or more (16 ohms when the 1 + 2 position is used). Speakers with an impedance down to 4 ohms (8 ohms when the 1 + 2 position is used) may be used, in which case the temperature rise of the cabinet may not satisfy BS 415 or IEC 65. Be sure to provide good ventilation, especially when speakers with an impedance of 4 ohms (8 ohms when the 1 + 2 position is used) are used.**
6. **The AC outlets provide no power when the power is turned off. Do not connect equipment requiring more than the outlet's specified value.**
7. **Keep the connection cords as far as possible from the TV.**

ANTENNAS

Used along with CATV antenna control unit

(Refer to the instruction book of CATV antenna control unit)

Use of CATV cable


CATV OUT
CATV IN
EXT FM IN
FM OUT
CONTROL IN
FM 300Ω
AM LOOP
GND
AM
FM 75Ω
ANTENNA
WARNING: SH K HAZARD
AVIS: RISQUE E CHOC EL
GND
CATV CONTROL

FM external antenna

CATV cable

To AV antenna terminal

Using F-type connector

F-type converter plug (attached to CATV antenna control unit)

- When using the FM antenna, attach to this apparatus.

Fig. 5

When using 2 FM antennas

- CATV antenna control unit can also be used as a switching unit for 2 FM antennas.

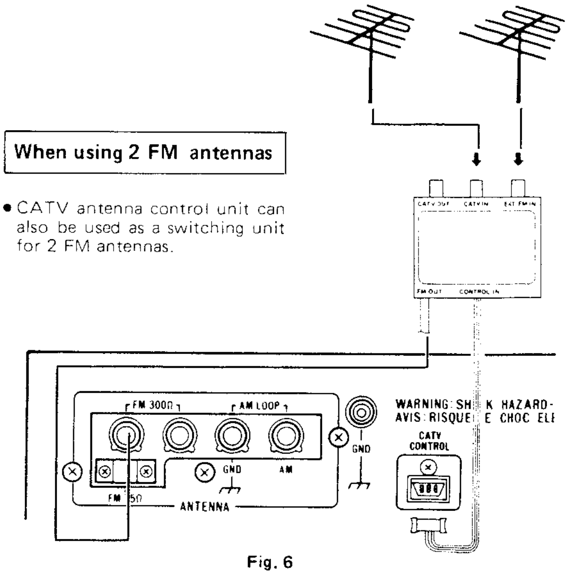

CATV OUT
CATV IN
EXT FM IN
FM OUT
CONTROL IN
FM 300Ω
AM LOOP
GND
AM
FM 75Ω
ANTENNA
WARNING: SH K HAZARD
AVIS: RISQUE E CHOC EL
GND
CATV CONTROL

Fig. 6

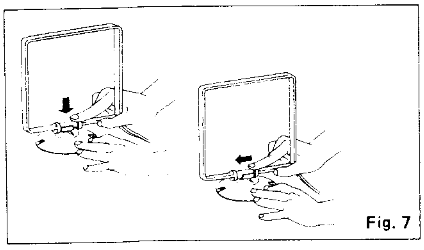


Fig. 7

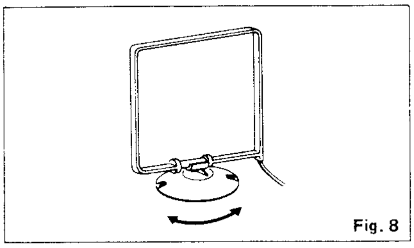
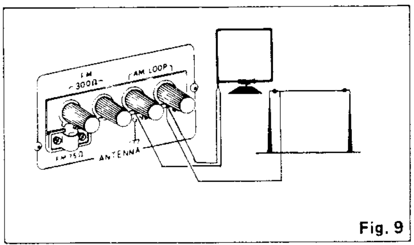
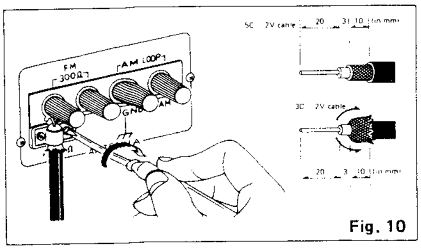
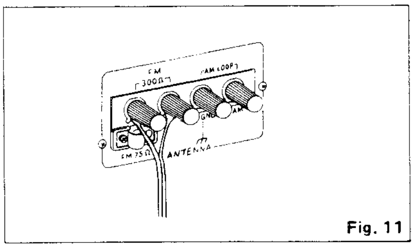
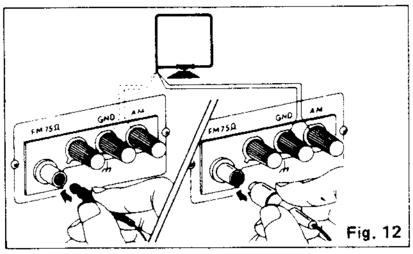


Fig. 8


FM
300Ω
AM LOOP
FM 75Ω
ANTENNA
Fig. 9


5C 2V cable
20
3
10
(in mm)
3C 2V cable
20
3
10
(in mm)
FM
300Ω
AM LOOP
GND
AM
ANTENNA
Fig. 10


FM
300Ω
AM LOOP
GND
AM
FM 75Ω
ANTENNA
Fig. 11


FM 75Ω
GND
AM
FM 75Ω
GND
AM
Fig. 12

AM antennas (Fig. 7, 8)

- How to assemble the AM loop antenna (Fig. 7)
  Snap the loop antenna onto the stand, then slide it as shown until firmly held in place.
- When too much noise occurs (Fig. 8)
  Change the direction of the loop antenna or reinstall it in a best position.
- AM (MW/LW) external antenna (Fig. 9)
  If AM reception is not good, connect an external AM antenna (single-wire antenna) to the AM ANTENNA terminal.

Notes:

- **If the provided loop antenna is not set up and its wires attached, or the antenna wires touch the rear panel, it will be impossible to receive AM broadcasts.**
- **When installing an AM external antenna, leave the AM loop antenna connected.**
- **If the AM loop antenna is too close to the speaker terminals, it may cause noise and should be moved away from the rear panel.**

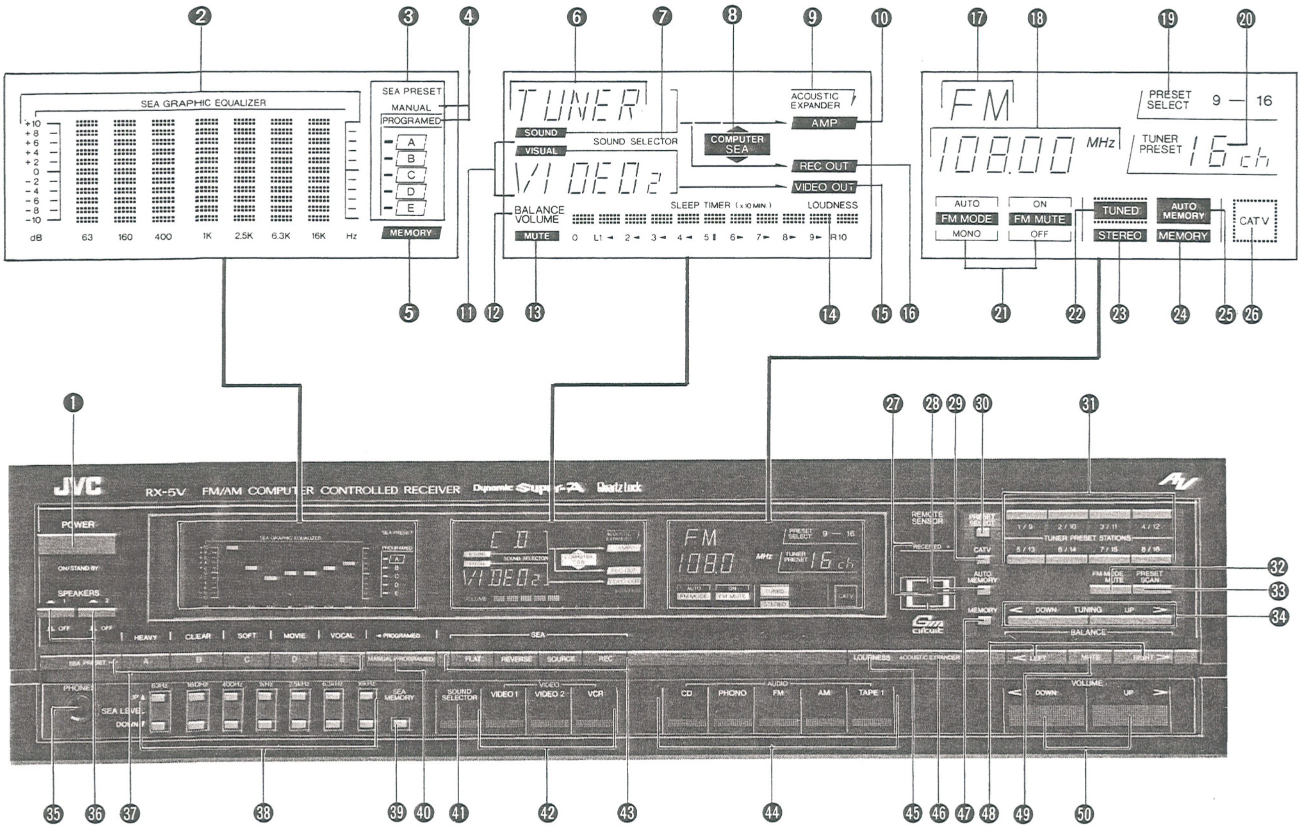
FM antennas

- 75-ohm antenna with coaxial lead (Fig. 10)
  Loosen the screws on the bracket and insert the cable into the ring from below. Then connect the stripped core to the upper terminal. The bracket ring works as the ground terminal.
- Feeder antenna (Fig. 11)
  Connect to the 300-ohm terminal.
  Take care that the wires of the feeder antenna do not touch any other terminal.

For W. Germany (Fig. 12)

- The FM wire antenna provided can be connected to the 75-ohm coaxial jack temporarily.
- 75-ohm antenna with coaxial type connector (DIN 45 332) is to be connected to the 75-ohm terminal.

FRONT PANEL


②
③
④
⑥
⑦
⑧
⑨
⑩
⑰
⑱
⑲
⑳
SEA GRAPHIC EQUALIZER
+10
+8
+6
+4
+2
0
-2
-4
-6
-8
-10
dB
63
160
400
1K
2.5K
6.3K
16K
Hz
SEA PRESET
MANUAL
PROGRAMED
A
B
C
D
E
MEMORY
TUNER
SOUND
SOUND SELECTOR
VISUAL
VIDEO2
ACOUSTIC EXPANDER
AMP
COMPUTER SEA
REC OUT
VIDEO OUT
BALANCE
VOLUME
SLEEP TIMER (×10 MIN)
LOUDNESS
MUTE
0
L1
2
3
4
5
6
7
8
9
R10
FM
108.00
MHz
PRESET SELECT
9
16
TUNER PRESET
16 ch
AUTO
FM MODE
MONO
ON
FM MUTE
OFF
TUNED
STEREO
AUTO MEMORY
MEMORY
CATV
⑤
⑪
⑫
⑬
⑭
⑮
⑯
㉑
㉒
㉓
㉔
㉕
㉖
①
㉗
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㉞
JVC
RX-5V FM/AM COMPUTER CONTROLLED RECEIVER
Quartz Lock
POWER
ON/STAND BY
SPEAKERS
REMOTE SENSOR
PRESET SELECT
CATV
AUTO MEMORY
MEMORY
TUNER PRESET STATIONS
1/9
2/10
3/11
4/12
5/13
6/14
7/15
8/16
FM MODE MUTE
PRESET SCAN
DOWN
TUNING
UP
BALANCE
LEFT
MUTE
RIGHT
HEAVY
CLEAR
SOFT
MOVIE
VOCAL
PROGRAMED
SEA
SEA PRESET
A
B
C
D
E
MANUAL/PROGRAMED
FLAT
REVERSE
SOURCE
REC
LOUDNESS
ACOUSTIC EXPANDER
PHONES
UP
SEA LEVEL
DOWN
SEA MEMORY
SOUND SELECTOR
VIDEO
VIDEO 1
VIDEO 2
VCR
AUDIO
CD
PHONO
FM
AM
TAPE 1
VOLUME
DOWN
UP
㉟
㊱
㊲
㊳
㊴
㊵
㊶
㊷
㊸
㊹
㊺
㊻
㊼
㊽
㊾
㊿

Fig. 13

① POWER

ON: Press to turn the power on. To turn the power off, press it again.

STAND BY: Even when all of the indicators are turned off, the memory circuit operates and the preset stations and the source selectors are not subject to cancellation or accidental alteration as long as the power cord is plugged into an AC outlet. This situation is called the STAND BY mode. The preset data and the source select data are maintained even in the case of a power failure or when the power cord is disconnected, if the period power is not applied does not exceed a couple of days.

Note:

- **Even in the STAND BY mode, this receiver consumes a small amount of electricity (5 watts). To shut the power completely off, disconnect the power cord.**

② SEA GRAPHIC EQUALIZER indicator

The dot point rises and falls in response to the pressing of the corresponding SEA LEVEL buttons to show the SEA level in each frequency band.

③ SEA PRESET pattern indicator

Pressing the MANUAL/PROGRAMED button will cause indicator A, B, C, D, or E to light, according to which preset pattern was being used the last time the unit was in that particular mode (MANUAL or PROGRAMED). If no preset pattern was being used, no preset pattern indicator will light. These indicators also light when an SEA PRESET button has been pressed, to select a preset pattern or to store a newly-created pattern in memory.

④ MANUAL/PROGRAMED indicator

Pressing the MANUAL/PROGRAMED button causes "MANUAL" or "PROGRAMED" to light on the display, indicating which mode has been selected.

⑤ MEMORY indicator
Pressing the MEMORY button lights "MEMORY" for about five seconds, thus indicating the unit is ready to store in memory the pattern you have created.

⑥ SOUND indicator
This shows which audio signal has been selected with the source selectors, for listening to or recording.

⑦ SOUND SELECTOR indicator
This indicator lights when the SOUND SELECTOR button has been pressed to ON.

⑧ COMPUTER SEA indicator
When the SEA SOURCE button is pressed, the upper arrow lights to show that the S.E.A. is processing the signals fed to the speakers or headphones.
When the SEA REC button is pressed, the lower arrow lights to show that the S.E.A. is processing the signals output from the REC OUT terminals.

⑨ ACOUSTIC EXPANDER indicator
This indicator lights when the ACOUSTIC EXPANDER button has been pressed to ON.

⑩ AMP indicator
The arrow shows which source is output to the amplifier.

⑪ VISUAL indicator
This shows which video signal has been selected with the VIDEO source selectors, for watching or recording.

⑫ VOLUME/BALANCE/SLEEP TIMER (x 10 MIN) indicator
This indicator is used as the VOLUME, BALANCE, or SLEEP TIMER indicator.
Normally, "VOLUME" lights and this indicator shows the level of sound going to the speakers or headphones. When the BALANCE buttons are pressed, "BALANCE", the center bar, "L" and "R" light and the balance between the right and left speakers is shown. When the SLEEP button on the remote control unit is pressed, "SLEEP TIMER (x 10 MIN)" lights. Each time the SLEEP button is pressed, the sleep timer's setting is increased in 10-minute increments to up to 60 minutes, with a square on this indicator lighting for each 10-minute increment added. However, the leftmost point does not light in this mode. This indicator is also useful to check the timer's turn-off time. The display continues in the BALANCE or SLEEP TIMER indication mode for about five seconds, and then returns to the VOLUME indication mode.

⑬ MUTE indicator
This indicator lights when the MUTE button has been pressed. Press it again returns the volume to its original level. Pressing the VOLUME UP/DOWN buttons also cancels the muting.

⑭ LOUDNESS indicator
When the LOUDNESS button has been pressed, this indicator lights.

⑮ VIDEO OUT indicator
The arrow shows which video source is output to the VCR terminal or the MONITOR OUT terminals.

⑯ REC OUT indicator
The arrow shows which audio source is being recorded on the tape deck or VCR.

⑰ FM/AM indicator
"FM" is displayed during FM reception and "AM" during AM reception.

⑱ Frequency indicator
The tuned-in frequency is displayed digitally. Four digits (kHz) are displayed during AM reception, five digits (MHz) (for Europe, U.K., Australia, and other countries) or four digits (MHz) (for U.S.A. and Canada) are displayed during FM reception.

⑲ PRESET SELECT indicator
Each time the PRESET SELECT button is pressed, this indicator shows "1 – 8" or "9 – 16" to show the group of preset stations to be selected.

⑳ TUNER PRESET indicator
When the one of the TUNER PRESET STATIONS buttons is pressed, this indicator shows its preset station number.

㉑ FM MODE/FM MUTE indicators
These indicators show AUTO/ON or MONO/OFF according to the setting of the FM MODE/MUTE button.

㉒ TUNED indicator
When a broadcast is being received, this indicator lights.

㉓ STEREO indicator
When an FM stereo broadcast is being received, this indicator lights. When the MODE indicator shows "MONO", this indicator will not light even if a stereo FM broadcast is being received. In that case, press the FM MODE/MUTE button so that "AUTO" is shown.

㉔ MEMORY indicator
Lights for about five seconds when the MEMORY button is pressed to on, or for one second when a frequency is stored in memory during auto memory.

㉕ AUTO MEMORY indicator
Lights when the AUTO MEMORY button is set to on.

㉖ CATV indicator (only for the U.S.A. and Canada)
When the CATV button is pressed to on, this indicator lights to show that this unit receives CATV programs.

㉗ REMOTE SENSOR
While infrared signals are being received from the remote control unit, the RECEIVED indicator lights.

㉘ AUTO MEMORY
Press this button and one of the TUNER PRESET STATIONS buttons to scan and preset broadcasts automatically. Starting from the frequency being displayed, the tuner tunes into increasingly higher frequencies, until a broadcast is tuned in. Then, the TUNED indicator lights and the channel number you have pressed earlier flickers for three seconds. If you don't wish to store this station in memory, press this button within four seconds, and the scan function will start again. Otherwise, the MEMORY indicator and channel number light together and the frequency is stored in that channel. Then, up-scanning continues. This process continues until the highest numbered channel preset station has a frequency stored in its memory. If the frequency reaches its upper limit, the auto memory function stops and the channel number in which the highest frequency is stored in memory is shown. If the upper limit of the frequency band is reached before this happens, the upper limit frequency is shown. Otherwise, when this process ends, the last frequency tuned to and its corresponding channel number are displayed.

Note:
To cancel the auto memory function, press one of the buttons in the tuner section other than the AUTO MEMORY or PRESET SELECT button.

㉙ CATV (only for the U.S.A. and Canada)

Use this button along with the separate CATV antenna control unit. When connecting the CATV cable to enjoy CATV programs or connecting the FM antenna to "CATV IN" of CATV antenna control unit to listen to an FM broadcast. Push this button to illuminate the CATV indicator. When the CATV indicator does not light, you can listen to the broadcast through the antenna connected to the EXT. FM IN of CATV antenna control unit. Also, the CATV button functions can also be stored in each preset station along with frequency.

㉚ PRESET SELECT

Press to set to preset channels 1 – 8 or 9 – 16. 1 – 8 or 9 – 16 PRESET SELECT indicator lights. Up to 16 stations for each band (FM 16, AM 16) can be preset as required. Even when, you pushed MEMORY button and then changed 1 – 8 and 9 – 16 by pressing this button, it is possible to accomplish preset memory by pressing the TUNER PRESET STATIONS button.

㉛ TUNER PRESET STATIONS

These buttons are used to select one of the preset stations or to store a frequency in memory. When one of these buttons is pressed, the preset number is shown by the TUNER PRESET indicator.

If one of these buttons is pressed when the MEMORY button has been pressed, the frequency which is being received will be stored in memory.

㉜ FM MODE/MUTE

For normal FM reception and automatic elimination of interstation noise, press this button so that FM MODE's "AUTO" and FM MUTE's "ON" light in the display.

When receiving a weak or noisy FM stereo broadcast, press this button so that "MONO" of FM MODE and "OFF" of FM MUTE light; the broadcast will be heard in mono but the clarity of reception will be improved.

㉝ PRESET SCAN

This button permits scanning of the preset stations. When this button is pressed, preset station 1 is tuned in, and its number flashes for about five seconds. This continues for each of the other stations, until all 16 (in the AM or FM band) have been scanned. When the desired station is received, pressing the PRESET SCAN button stops the scanning and the RX-5VBK/RX-5VLBK remains tuned to the station. If no stations were selected during this function, the frequency tuned to before this function was initiated is tuned to again.

㉞ TUNING UP/DOWN

DOWN: Press to tune to lower frequencies.

UP: Press to tune to higher frequencies.

Manual tuning

Tapping these buttons changes the frequency in single steps of 9 or 10 kHz in AM, or 50 or 100 kHz in FM.

Auto tuning

Holding either button pressed for more than one second and then releasing it starts auto tuning; when a broadcast is received, tuning will stop. But if either button is kept held in, scanning continues even when a broadcast is received. In auto tuning, pressing either button again stops scanning.

Note:

- **When one of these buttons is being tapped, the frequency causes to change at the upper or lower limit of the frequency band. In auto tuning, the frequency scanning reverses direction when the upper or lower limit is reached.**

㉟ Headphone jack (PHONES)

Plug stereo headphones into this jack for private listening and recording monitoring. If you want to listen to sound from the headphones only, press the SPEAKERS buttons to OFF.

㊱ SPEAKERS

SPEAKERS-1

Press to switch the speakers connected to the SPEAKERS 1 terminals on or off.

SPEAKERS-2

Press to switch the speakers connected to the SPEAKERS 2 terminals on or off.

㊲ S.E.A. PRESET

Press to store the displayed S.E.A. pattern in memory or to recall the preset S.E.A. pattern corresponding to the button pressed. While in the MANUAL mode, pressing the MEMORY button and then one of these five buttons will store the pattern you have created. Later, while in MANUAL mode, that pattern can be recalled by pressing the appropriate SEA PRESET button. Up to five original patterns can be stored for recall in this way.

A different set of S.E.A. patterns is available when in the PROGRAMED mode. These five patterns (HEAVY, CLEAR, SOFT, MOVIE, and VOCAL) have been permanently stored in memory before the unit was shipped, and may not be replaced. So, up to 10 patterns may be recalled. For more details, refer to page 16.

㊳ SEA LEVEL

The built-in graphic equalizer divides the audio spectrum into seven frequency bands with center frequencies from 63 Hz to 16 kHz at intervals of 4/3 octave.

When the S.E.A. level is set to '0' (center position), frequency response is flat. The response in each band can be varied by ±10 dB by pressing the UP or DOWN SEA LEVEL buttons.

The buttons for different frequency bands can be pressed at the same time, and holding them down causes the level to continue rising or falling.

63 Hz: Raise to emphasize the very low bass response of organs, drums, and contrabass. It produces stable and solid sound with emphasis and eliminates the unclear sound response of low frequencies with de-emphasis.

160 Hz: Emphasize to obtain a more expanded low sound. De-emphasize to eliminate unclear sound caused by large or nearly empty listening rooms.

400 Hz: This frequency range is the base on which music is constructed. Emphasize to really put a punch in your music.

1 kHz: Most effective in emphasizing or de-emphasizing the human voice. Emphasize to cause the vocalist to be brought to the foreground, or de-emphasize to cause it to recede into the background.

2.5 kHz: This frequency stimulates the human ear. If the music sounds hard or metallic, de-emphasize.

6.3 kHz: Boost to add clarity to winds and strings. This frequency band varies the tonal expression, influencing the subtleties of the music.

16 kHz: Boosting this frequency range properly adds to the delicacy of highs, with cymbals and triangles resounding in a more ear-pleasing manner, and provides a feeling of extension. This frequency band can also be used to compensate for cartridge response since most moving-magnet cartridges have their resonance peaks in the frequency range from 10 kHz to 20 kHz.

㊴ SEA MEMORY

Press this button and the MEMORY indicator will light for about five seconds. While it is lit, press one of the SEA PRESET buttons to store in memory the SEA pattern currently being displayed.

㊵ MANUAL/PROGRAMED

Press to switch between the MANUAL and PROGRAMED SEA pattern modes.

㊶ SOUND SELECTOR

When this button is pressed (lighting the SOUND SELECTOR indicator), the SOUND signal can be selected from a different AUDIO source in combination with the VISUAL signal originating from the VIDEO source.

Example: When the VIDEO 1 button and the SOUND SELECTOR button are pressed:

Now, press an AUDIO source selector button (CD, PHONO, AM, FM, TAPE 1). The VISUAL signal from the VIDEO 1 terminal is output to the VIDEO MONITOR OUT terminal and the VIDEO VCR REC terminal. The AUDIO signal from the audio source is heard from the speakers or headphones, and is output to the AUDIO VCR REC terminal. In this way, a VCR may record the SOUND and VISUAL signal from separate sources.

㊷ VIDEO

VIDEO 1: Press this button to select the source from the video unit connected to the VIDEO 1 terminals.

VIDEO-2: Press this button to select the source from the video unit connected to the VIDEO 2 terminals.

VCR: Press this button to select the source from the VCR connected to the VCR terminals.

㊸ SEA

FLAT: Press this button for a flat response.

REVERSE: Press this button to reverse the pattern's characteristics.

SOURCE: Press this button to listen to the S.E.A.-compensated sound.

REC: Press this button to record S.E.A.-compensated signals.

Notes:

- **The settings of the SOURCE and REC buttons are shown in the signal flow chart.**
- **The S.E.A.-compensated TAPE 1 sound is available for either SEA SOURCE or SEA REC.**

㊹ AUDIO

CD: Press this button to listen to a compact disc player connected to the CD terminals.

PHONO: Press to listen to a turntable connected to the PHONO terminals.

FM: Press this button to listen to an FM broadcast.

AM: Press this button to listen to an AM broadcast.

TAPE 1: Press to listen to a tape deck connected to the TAPE 1 terminals.

㊺ LOUDNESS

Press this button to compensate for the ear's lower sensitivity at low listening levels.

㊻ ACOUSTIC EXPANDER

When this button is pressed, the ACOUSTIC EXPANDER indicator lights and the sound image is expanded; a monaural signal will be given a stereo effect and a stereo signal sounds better.

Notes:

- **When a TV or VCR is monaural, use the L and R distributor (mono – L and R) for connecting the left and right terminals.**
- **The ACOUSTIC EXPANDER sound effect cannot be recorded.**

㊼ MEMORY

Press this button, and the MEMORY indicator will light to show that it is ready to receive a memory setting. Pressing the station select button while the MEMORY indicator is lit (for about five seconds) makes it possible to store the station in the specified memory. At this time, the channel number is shown in the display.

㊽ BALANCE (LEFT/RIGHT)

Use to adjust the balance between the left and right speakers. Press the LEFT button once to adjust the balance to the left by one step and the RIGHT button to adjust to the right. Holding them pressed changes the balance continuously. The BALANCE indicator is shown on the display.

㊾ MUTE

Press this button, and the MUTE indicator will light and the sound will be instantaneously muted. To return the volume to its original level, press this button again, or press the BALANCE or VOLUME buttons.

㊿ VOLUME (DOWN/UP)

Adjust the volume of speakers or headphones. Press the UP button once to increase the volume by one step, and the DOWN button once to decrease it by one step; this level is shown by the VOLUME indicator. Holding down one of these buttons will cause the volume to progressively rise or fall.

COMPU LINK REMOTE CONTROL SYSTEM

COMPU LINK
//// Remote ////
Control System

The COMPU LINK REMOTE CONTROL SYSTEM was developed by JVC. You can not only control each COMPU LINK component from the remote control unit, but also perform the following advanced operations with ease.

Automatic source selection

If the attached remote cable is used to connect this unit to other JVC components with SYNCHRO terminals, sources can be switched with just one touch of this unit's source selector buttons and the corresponding component will start to play automatically. The source select button of the remote control unit or the appropriate component's activation button may also be used.

When switching over from one component to another, such as the cassette deck, turntable or CD player, the previous component will stop playing after about five seconds.

Synchronized recording

Synchronized recording refers to the process whereby the cassette deck automatically commences recording, in synchronization with the CD player or turntable.

Set the cassette deck to REC/PAUSE mode according to the procedures in the instruction manual.

When synchronously recording the CD player, push the PLAY button on the CD player.

The cassette deck enters the record mode the moment the CD player starts and synchronized recording commences.

Synchronized recording stops automatically when the CD player stops playing.

To cancel synchronized recording, push the STOP button of the CD player, turntable or cassette deck.

Notes:

- **When the REC/PAUSE mode is set by pushing PAUSE after depressing the REC and PLAY buttons simultaneously, synchronized recording is not possible. For details, refer to your cassette deck's instruction manual.**
- **Abnormal operation will result if the power supply of one of the components is interrupted during synchronized recording. If this happens, push the activation button again to restart.**

REMOTE CONTROL UNIT (RM-S9)

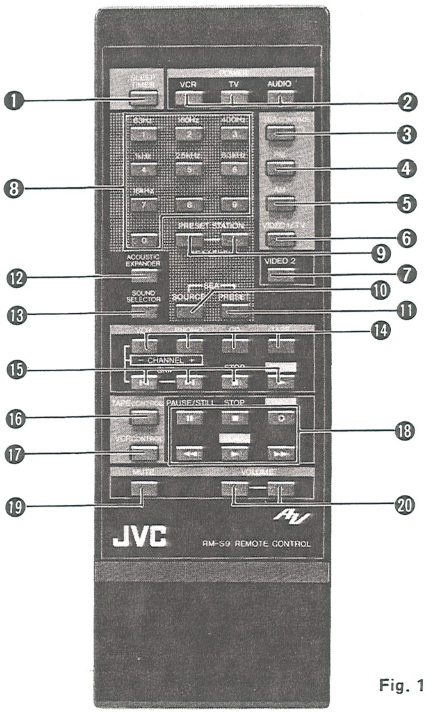

Fig. 14

❶ SLEEP TIMER

Each time this button is pressed, the sleep timer's setting is increased in 10-minute steps up to 60 minutes, and its setting is shown on the display.

❷ POWER

VCR: Press this button to switch the VCR's power on or off.

TV: Press this button to switch the TV's power on or off.

Note:

- **As long as one of the JVC-specified VCRs or TVs is used, it can be remote-controlled.**

AUDIO: Press this button to switch the RX-5VBK/RX-5VLBK's power on or off, and to turn on or off the AC OUTLETS.

❸ SEA CONTROL

Press this button, then use the S.E.A. frequency band select buttons to select frequency band to be adjusted, then press the SEA LEVEL buttons to adjust it.

❹ FM

Press this button to listen to an FM broadcast.

❺ AM

Press this button to listen to an AM broadcast.

⑥ VIDEO 1/TV

Press this button to watch the TV or the video equipment connected to the VIDEO 1 terminals.

Note:

- **Connect the LINE OUTPUT of the TV to the VIDEO 1 terminal.**

⑦ VIDEO 2

Press this button to watch the video equipment connected to the VIDEO 2 terminals.

⑧ S.E.A. frequency band select buttons/Buttons for direct access to FM/AM presets or TV channels

Once the SEA CONTROL button has been pressed, a particular frequency band can be chosen with these buttons for adjustment with the SEA LEVEL buttons.

When the FM or AM button has been pressed, these buttons can be used to select the preset station by pressing the preset station number as follows.

1) For channels one to nine: push the "0" button, then the desired channel number. e.g., "0" – "1" (channel 1), "0" – "2" (channel 2).
2) For channels ten and above: push the buttons in the order the digits of the channel number appear. e.g., "1" – "0" (channel 10), "1" – "1" (channel 11).

When the VIDEO 1/TV button has been pressed, these buttons can be used to select a TV channel.

Note:

Before operating the television by remote control, be sure to carefully read the television instruction manual.

⑨ PRESET STATION/SEA LEVEL

When the SEA CONTROL button has been pressed, these buttons can be used to adjust the S.E.A. level of the frequency band selected by the S.E.A. frequency band select buttons.

When the FM, AM, or VIDEO 1/TV button has been pressed, a preset station or TV channel can be selected by using these buttons to sequentially scan the preset stations or channels in either direction.

⑩ SEA SOURCE

Press this button to listen to the source with S.E.A. compensation.

⑪ SEA PRESET

Press this button to select an S.E.A. preset pattern. Each time this button is pressed, the preset pattern the equalizer is set to successively changes in this order: MANUAL A – B – C – D – E – PROGRAMED A – B – C – D – E, then returns to the MANUAL A again.

⑫ ACOUSTIC EXPANDER

Press this button to switch the acoustic expander function on or off.

⑬ SOUND SELECTOR

Use this button to combine the VISUAL signal from a VIDEO source with the SOUND signal from a different AUDIO source.

⑭ Source selectors

VCR: Press to select the VCR connected to the VCR terminals.

PHONO: Press to listen to a turntable connected to the PHONO terminals.

CD: Press to listen to a compact disc player connected to the CD terminals.

TAPE 1: Press to listen to a tape deck connected to the TAPE 1 terminals.

⑮ Operation buttons for the compact disc player/turntable/tape deck/VCR, as selected by the source selectors

CHANNEL/SKIP: Press these buttons to skip tracks on compact discs, scan the tunes on tapes, and change channels on the VCR's tuner.

STOP: Press this button to stop playing the compact disc player, tape deck, turntable, or VCR.

PLAY: Press this button to start playing the compact disc player, tape deck, turntable, or VCR.

⑯ TAPE CONTROL

Press this button to operate the tape deck connected to the TAPE 1 terminals.

⑰ VCR CONTROL

Press this button to operate the VCR connected to the VCR terminals.

⑱ Operation buttons for the tape deck/VCR selected by the TAPE CONTROL or VCR CONTROL

⏸ **(PAUSE/STILL):** Press this button to pause during playback or recording. To release this function, press the PLAY button.

■ **(STOP):** Press this button to stop operation.

○ **(REC):** Press this button with the PLAY (▶) button to record with the tape deck or VCR. When this button is pressed with the PAUSE/STILL (⏸) button, REC-PAUSE mode is activated.

◀◀ : Press to fast wind the tape from right to left.

▶ **(PLAY):** Press this button to play a tape.

▶▶ : Press to fast wind the tape from left to right.

⑲ MUTE

Press this button to instantly mute the sound. To return the volume to its original level, press this button again, or press the BALANCE or VOLUME button.

⑳ VOLUME

Press the "+" button to increase the volume and the "-" button to decrease it.

●How to install the batteries (Fig. 15)

1. Slide the cover of the battery case in the direction of the arrow to remove it.
2. Install the provided batteries (AA, SUM-3, R6: 1.5 V), with their polarities properly placed.
3. Re-install the cover of the battery case.

●Battery life

The batteries can be used for about one year.

●Battery replacement time

When the distance at which the remote control unit functions begins to decrease, replace both batteries.

Notes:

- **●When the remote control is operated too near the receiver during AM reception, it may cause interference.**
- **●The remote control can be used up to about 8 m (26 ft) from the receiver.**

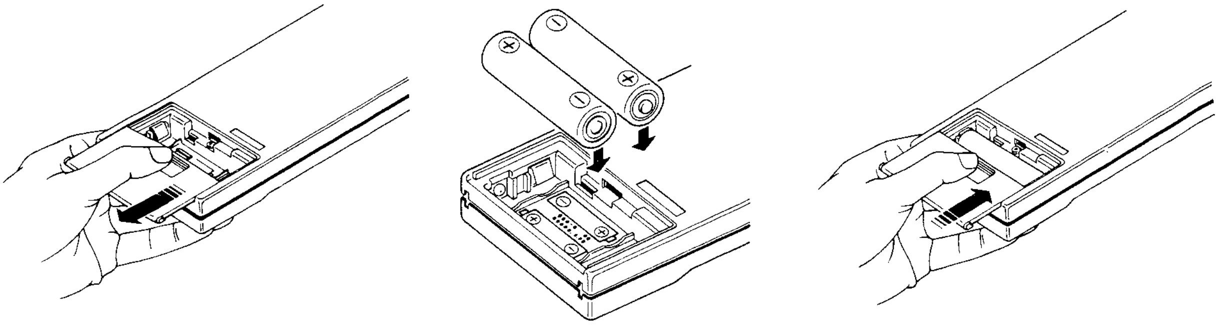

Fig. 15

●How to use the provided connection bar (Fig. 16)

When using the RM-S9 with a compatibly-designed remote control unit of a TV or other component, connect the two units with the connection bar as follows.

Notes:

- **●For safety, remove the bar when the units are separated.**
- **●To protect yourself from the connection bar's exposed edges, remove the bar from the unit after draping it with a cloth.**

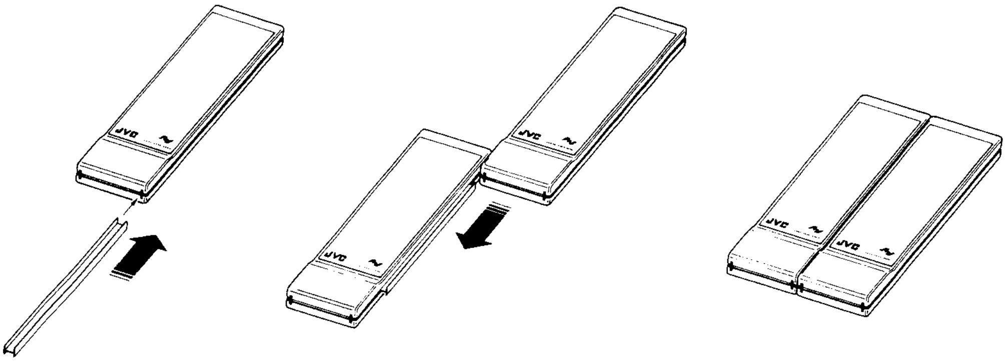

Fig. 16

OPERATION

Before use

Connect each component correctly, and then plug the power cord to an AC wall outlet.

Basic operation

1. Press the POWER button to on.
2. Select the speaker system with the SPEAKERS buttons.
3. Proceed through the steps described below according to your purpose.
4. Adjust the volume and balance to you want to hear.
5. Use the SEA buttons to obtain the tone you want to hear.

Presetting to selected stations (FM or AM)

There are two ways to preset stations using the TUNING buttons . . . 1. Auto tuning/manual tuning, 2. Auto memory function.

1 Auto tuning/manual tuning

(Refer to ㉞ TUNING UP/DOWN buttons.)

1. Press the FM or AM button.
2. Tune to a desired station by pressing the TUNING button for auto tuning or tapping it for manual tuning.
3. Press the PRESET SELECT button as required, so that the PRESET SELECT indicator shows "1 – 8" or "9 – 16"
4. Press the MEMORY button so that the MEMORY indicator lights.
5. Press one of the TUNER PRESET STATIONS buttons.
6. Perform the same pre-tuning procedure (steps 2, 3, 4) for the remaining channels. Pre-tuning is possible for up to 32 stations (16 FM and 16 AM stations).

2 How to operate the auto memory function

(Refer to ㉘ AUTO MEMORY button.)

1. Press the FM or AM button.
2. Tune to the frequency from which you wish the AUTO MEMORY function to begin its scanning.
3. Press the PRESET SELECT button as required.
4. Press a TUNER PRESET STATIONS button and the AUTO MEMORY button. The AUTO MEMORY indicator lights and auto scanning starts from the displayed frequency upward.
   When a broadcast is tuned in, the TUNED indicator lights and your selected station number flashes. If you do not press the AUTO MEMORY button, the MEMORY indicator and that channel number light together and the frequency is stored in memory. This continues until the highest numbered channel preset station has a frequency in its memory or auto scanning reaches the highest frequency.

Listening to broadcasts

1. Press the FM or AM button.
2. Press the desired preset station select button to listen to any channel. The channel number corresponding to the button pressed is shown in the display.

Notes:

- **Adjust the antenna so that the TUNED indicator is lit.**
- **When FM broadcast signals are too weak to be received, press the FM MODE/MUTE button to show "MONO"/"OFF".**
- **For the reception of AM broadcasts, set the loop antenna in the position where reception is best.**
- **Before listening to broadcasts, first preset the stations correctly; if they are not pre-tuned accurately, reception will be noisy.**

Listening to records

1. Press the PHONO button so that the PHONO indicator lights.
2. Operate the turntable as described in its operation manual.

Notes:

- **Use a turntable with an MM cartridge.**
- **If your turntable has a separate ground lead, connect it to the GND terminal.**

Listening to tapes

1. Press the TAPE 1 button so that the TAPE 1 indicator lights.
2. Operate the tape deck for playback as described in its operation manual.

Watching and listening to VIDEO 1 (VIDEO 2)

1. Press the VIDEO 1 (VIDEO 2) button so that the SOUND and VISUAL indicators light and "VIDEO 1" ("VIDEO 2") is shown with each one.
2. Operate the video unit as described in its operation manual.

Note:

- **Connect the video and audio signal cords of the video unit to the AUDIO and VIDEO terminals of this unit. If a unit other than a video unit is connected, connect it to the AUDIO terminals only.**

When the SOUND SELECTOR function is used

Refer to ㊶ SOUND SELECTOR button on page 10.

1. Press the VIDEO 2 (VIDEO 1, VCR) button; the corresponding SOUND and VISUAL indicators in the display will light. (Fig. 17)
2. Operate the video unit as described in its operation manual. With this setting, the SOUND and VISUAL signals input via the VIDEO 2 (VIDEO 1, VCR) terminals are output.
3. Press the SOUND SELECTOR button so that the SOUND SELECTOR indicator lights.
4. Press the desired AUDIO source selector button (CD, PHONO, AM, FM, TAPE 1) (Fig. 18). The SOUND signal of the source thus selected is output from the speakers, while the VISUAL signal from the VIDEO 2 (VIDEO 1, VCR) terminals is output from the MONITOR OUT terminals.

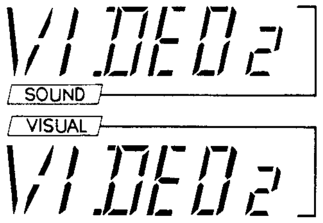

Fig. 17

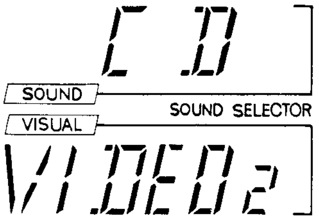

Fig. 18

Watching and listening to a VCR

1. Press the VCR button.
2. Operate the VCR for playback as described in its operation manual.

Recording tapes

Recording from records

1. Press the PHONO button so that the PHONO indicator lights.
2. Operate the turntable.
3. Operate the tape deck for recording.

Notes:

- **You can also monitor the sound being recorded with headphones.**
- **The sound you hear from the speakers or headphones is the source sound (record playback sound in this case), not the recording on the tape.**
- **If you have a three-head tape deck with independent record and playback heads or a tape deck having an independent monitor facility, operate it as follows.**

If you are using the JVC three-head tape deck provided with SYNCHRO terminals:

1. Connect the SYNCHRO terminals of each unit using the remote cables.
2. Connect the tape deck to the TAPE 1 terminals.
3. You can monitor the recorded sound while recording by pressing the TAPE 1 button. But, do not monitor while in the SEA REC mode, since pressing this button cancels the SEA REC function.
4. To return to listening to the source sound, press the button of the recorded sound's source.

If you are using a three-head tape deck without the SYNCHRO terminal:

It is impossible to monitor the recorded sound.

Recording from other sources (AM, FM, CD, VCR, VIDEO 1, and VIDEO 2)

Press the button corresponding to the source to be recorded. All other operations are identical to those when recording from records.

*For S.E.A. recording using the SEA REC button, refer to page 16.

Recording from a video unit

1. Press the VIDEO 1 (VIDEO 2) button.
2. Operate the video unit (VIDEO 1, 2).
3. Operate the VCR for recording.

Note:

- **When the SOUND SELECTOR button is pressed, the SOUND SELECTOR function can be used for recording as described on page 10. The VISUAL signal from the VIDEO 1 (VIDEO 2) terminal and the SOUND signal selected are recorded on the VCR. (The AUDIO signal cannot come from a video unit when the SOUND SELECTOR function is being used.)**

*For S.E.A. recording using the SEA REC button, refer to page 16.

Using stereo headphones

Stereo headphones can be plugged into the front panel jack. The signal from this jack is independent of the speakers.

1. Plug stereo headphones into this jack for private listening.
2. To listen through headphones while listening to the speakers, press the appropriate SPEAKERS buttons to ON (▬).

Note:

- **Pull out the headphone plug when not in use.**

Tape dubbing

To perform tape dubbing, two tape recorders should be connected, one to the TAPE 1 terminals (called "No. 1" tape deck) and another to the VIDEO 1 (or VIDEO 2) terminals (called "No. 2" tape deck).

Dubbing from No. 2 to No. 1

1. Press the VIDEO 1 (or VIDEO 2) button.
   Sound can be monitored through speakers or headphones.
2. Operate No. 1 tape deck for recording.
3. Operate No. 2 tape deck for playback.

Notes:

- **During dubbing, S.E.A. recording is possible.**
- **If using a tape deck with three-head or a monitor facility, see "Notes" on the left.**
- **Dubbing the AUDIO signal from the No. 1 tape deck to a VCR and from a VCR to the No. 1 tape deck is possible; in these cases, S.E.A. recording is possible.**

OPERATION OF THE S.E.A. GRAPHIC EQUALIZER

Compensation for room acoustics

The frequency response of a listening room varies depending on the room's shape or furnishings, and the position of the listener in the room. Each listening position in the room provides the listener with a different set of frequency responses, as a result of different degrees of reverberation, reflection, echo, and absorption affecting each frequency.

The S.E.A. system can function to make the sound response of a room flat by emphasizing those frequencies having a high degree of absorption and de-emphasizing those frequencies having a high degree of reflection.

The frequency ranges affected by 'absorption' and 'reflection' are narrow, therefore, it is only necessary to compensate the corresponding frequency band.

Since conventional tone control systems simply adjust the highs and lows centered around the 1 kHz frequency, they are both imprecise and incomplete.

The RX-5VBK/RX-5VLBK monitors and equalizes seven separate audio frequency bands, thus allowing you to make the necessary adjustments in the precisely appropriate frequency bands in order to compensate for the acoustic response of a room and any listening position in it.

Custom sound processing

When a studio recording is made, the sound signals are processed to produce sound that is unique to a particular group or orchestra. With the RX-5VBK/RX-5VLBK, you can do this at home — producing sound tailored exactly to your tastes by emphasizing or de-emphasizing various parts of the music.

Operation

S.E.A. pattern memory

For your own sound compensation and processing, you can use the 10 PROGRAMED and MANUAL preset S.E.A. patterns.

PROGRAMED

These five S.E.A. patterns were preset at the factory to offer suggested settings for various types of audio programs. Each preset pattern is shown below. After recalling these patterns, you can further change each frequency band to suit yourself. However, since they are representative patterns, the original, stored pattern will be unchanged.

HEAVY (A)

Used for music with a heavy beat, such as rock music. Low frequencies are emphasized to produce a deeper, more powerful sound. Higher frequencies are also emphasized to enhance and bring clarity to the highs, including the percussive notes.

CLEAR (B)

For crisp, clear sound with transparent highs. The low and middle frequencies that tend to be unclear are de-emphasized, and the middle and high frequencies that strengthen the vocal component of the music are emphasized.

SOFT (C)

For background music or lower volume levels. The very low frequencies, which need boosting at low volume levels, are emphasized, and the stimulating effect of higher frequencies is diminished by de-emphasizing high frequencies.

MOVIE (D)

For TV, VCR, and videodisc sound. The low and high frequencies, which are usually of insufficient strength in the sound of these sources, are emphasized to produce a balanced, deeper sound. Also, the excessive brightness that is characteristic of these sources' sound is cut back by de-emphasizing the middle frequency band.

VOCAL (E)

For music that is chiefly vocal, or speech. The middle frequencies, which carry the human voice, are emphasized, while surrounding frequencies are reduced. To accent the higher vocal notes, the highest frequencies are also boosted.

MANUAL

These five S.E.A. pattern memories are provided to allow you to create, store, and recall up to five S.E.A. patterns.

To store the S.E.A. pattern in memory, proceed as follows:

1. Set the S.E.A. pattern using the SEA LEVEL UP/DOWN buttons. This will cause the MANUAL indicator to light, if it has not been lit already.
2. Press the MEMORY button. The MEMORY indicator will light for five seconds.
3. During this period, press the appropriate SEA PRESET button to store the pattern in memory. The SEA PRESET indicator corresponding to the button just pressed will light, the MANUAL indicator will re-light, and the MEMORY indicator will go off.

S.E.A. recording

The S.E.A. graphic equalizer tailors the sound to your own particular taste or compensates for room acoustics or system characteristics, as described above. The RX-5VBK/RX-5VLBK is equipped with an SEA REC button which makes it possible to record with the added effect of the S.E.A.

Operation

1. Set the S.E.A. pattern as required.
2. Press the SEA REC button.
3. Proceed in the same way as in normal recording.

Notes:

- **Pressing the VOLUME buttons during S.E.A. recording will not affect the recording level.**
- **While S.E.A.-compensated TAPE 1 sound is available to the VCR REC terminals, the SEA SOURCE button cannot be used.**

SPECIFICATIONS

AMPLIFIER SECTION AUDIO

Output power :

60 watts per channel, min. RMS, both channels driven, into 8 ohms from 20 Hz to 20 kHz, with no more than 0.007 % total harmonic distortion.

70 watts per channel, min. RMS, both channels driven, into 8 ohms from 40 Hz to 20 kHz, with no more than 0.2 % total harmonic distortion.

65 watts per channel, min. RMS, both channels driven, into 8 ohms at 1 kHz (DIN).

60 watts per channel, min. RMS, both channels driven, into 8 ohms at 1 kHz with no more than 0.003 % total harmonic distortion.

Total harmonic distortion	0.003 % at 60 watts (1 kHz, 8 ohms)	
Intermodulation distortion	0.007 % at 60 watts	
Damping factor	40 at 8 ohms, 1 kHz	
Input sensitivity/impedance		
PHONO	2.5 mV/47 kohms	
TAPE 1 PLAY, CD, VCR PLAY, VIDEO 1, VIDEO 2	220 mV/47 kohms	
Recording output level	220 mV	
Frequency response		
PHONO (RIAA equalization)	20 Hz – 20 kHz, +0.5 dB -0.5 dB	
TAPE 1 PLAY, CD, VCR PLAY, VIDEO 1, VIDEO 2	5 Hz – 50 kHz, +0 dB, -1 dB	
S.E.A. graphic equalizer		
Center frequencies	63 Hz, 160 Hz, 400 Hz, 1 kHz, 2.5 kHz, 6.3 kHz, 16 kHz	
Control range	±10 dB	
Signal-to-noise ratio		
PHONO	71 dB ('66 IHF) 78 dB ('78 IHF) (Rec out)	66 dB (DIN)
TAPE 1 PLAY, CD, VCR PLAY, VIDEO 1, VIDEO 2	100 dB ('66 IHF) 77 dB ('78 IHF)	67 dB (DIN)

FM TUNER SECTION

	'78 IHF	DIN (For Europe)
Tuning range	87.5 MHz – 108.0 MHz	87.5 MHz – 108.0 MHz
Usable sensitivity	Mono 10.8 dBf 0.95 µV/75 ohms 1.9 µV/300 ohms	–
26 dB quieting sensitivity	–	1.5 µV/75 ohms 3 µV/300 ohms
50 dB quieting sensitivity	Mono 16.3 dBf (1.8 µV/75 ohms 3.6 µV/300 ohms) Stereo 38.3 dBf (22.5 µV/75 ohms 45 µV/300 ohms)	–
S/N 46 dB stereo sensitivity	–	Stereo 23 µV/75 ohms
Signal-to-noise ratio	Mono 82 dB Stereo 73 dB (A-net)	Mono 72 dB Stereo 64 dB (weighted)
Total harmonic distortion (1 kHz)	Mono 0.15 % Stereo 0.2 %	Mono 0.1 % Stereo 0.3 %
Frequency response	30 Hz – 15 kHz, +0.5 dB, -3 dB	
Capture ratio	1.5 dB	1.0 dB
Alternate channel selectivity	60 dB ±400 kHz	55 dB ±300 kHz
Image response ratio	56 dB at 98 MHz	
IF response ratio	85 dB at 98 MHz	
Stereo separation	40 dB at 1 kHz	40 dB at 1 kHz

AM TUNER SECTION

	'78 IHF	DIN (For Europe)
Tuning range	522 kHz – 1,629 kHz Channel space 9 kHz 530 kHz – 1,630 kHz Channel space 10 kHz 530 kHz – 1,710 kHz (For U.S.A. and Canada)	
Sensitivity	30 µV* 300 µV/m*	
Signal-to-noise ratio	50 dB* (100 mV/m)	
Selectivity	38 dB, ±10 kHz	35 dB, ±9 kHz*
Image response ratio	40 dB*	
IF response ratio	60 dB	
Total harmonic distortion	0.5 %* (100 mV/m)	

VIDEO SECTION

Output signal level (VCR REC) (MONITOR OUT A, B)	1 Vp-p (at 1 Vp-p input)
Impedance	75 ohms unbalanced
Synchronization	Negative
Signal-to-noise ratio	45 dB
Crosstalk	45 dB (3.58 MHz)

Design and specifications subject to change without notice.

*Measured at 1,000 kHz for '78 IHF and at 999 kHz for DIN.

DIMENSIONS AND WEIGHT

Dimensions			Weight
Width	Height	Depth	
435 mm 17-3/16"	117 mm 4-5/8"	381 mm 15"	9.0 kg 19.9 lbs.

POWER SPECIFICATIONS

Areas	Line voltage & frequency	Power consumption
U.S.A.	AC 120 V ∿, 60 Hz	300 watts 380 VA
Canada		
Continental Europe	AC 220 V ∿, 50 Hz	200 watts
U.K.	AC 240 V∿, 50 Hz	200 watts
Australia		
Other areas	AC 110/120/220/240 V∿ selectable, 50/60 Hz	250 watts